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Iowa Handgun Permits

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Iowa handgun permits

by

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A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Sociology

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NOMENCLATURE

<u>ACRONYM</u>	<u>EXPLANATION</u>
ATF	U.S. FEDERAL BUREAU OF ALCOHOL, TOBACCO, FIREARMS, AND EXPLOSIVES
EFA	EXPLORATORY FACTOR ANALYSIS
ERS	USDA ECONOMIC RESEARCH SERVICE
HPIR	HANDGUN PERMIT ISSUANCE RATE/S
IDPS	IOWA DEPARTMENT OF PUBLIC SAFETY
NFA	NATIONAL FIREARMS ACT OF 1934
NIBRS	NATIONAL INCIDENT-BASED REPORTING SYSTEM
NRA	NATIONAL RIFLE ASSOCIATION
MSA	METROPOLITAN STATISTICAL AREA
RUCC	USDA RURAL-URBAN CONTINUUM CODE
T/P	TECHNOCRATIC/PROFESSIONAL COUNTY TYPE

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ABSTRACT

Private gun ownership is fairly common in the United States. Estimates indicate that there are more privately owned guns than people in the U.S. It is estimated that Iowa has more firearms in private hands than all but a few states. Rural county handgun permit to carry rates are two to three times greater than urban rates. This study examines handgun permit to carry rates by Iowa county type. The study asks four questions: (1) Is Iowa handgun carrying explained by a strict rural-urban handgun difference, or is it more complex? (2) If it is more complex than a simple rural-urban split, what measures produce distinction? (3) How did Iowans immediately respond to a more generous, 2011, Iowa, handgun permit law? (4) How did Iowans respond to the same law over time? It is theorized that the eleven most rural, counties in the state, all but one located in south, southwest, and northwest Iowa, have a historical, socio-demographic background that generates a culture positively associated with handgun carrying. In 2011, Iowa became a non-discretionary handgun permit to carry state diminishing the discretionary power of the county sheriff in the handgun permit to carry decision process. Exploratory factor analysis, cross sectional regression analysis, and Scheffe tests, along with slope regression line differential and longitudinal regression analysis, were used. Aggregated county-level permit data from the Iowa Department of Public Safety were used. County types were determined by socio-demographics and the UDSA Rural-Urban Continuum Code. Findings showed that explaining gun permitting by a rural-urban split was inadequate; socio-demographic variable clusters explain more; Iowans responded similarly to handgun permit law change by year and over time; and urbanism decreased handgun permitting by year but not over time.

CHAPTER ONE: INTRODUCTION

In the United States, guns represent a reasonably significant part of our value system. Indeed, the National Opinion Research Center (2010: n.p.) asserts that between 32 and 39 percent of all U.S. households have an operable firearm. American gun culture incorporates arguments about safety and security, individual rights and freedom, and political partnerships, and it drives multibillion-dollar gun-related commercial enterprises. In addition, guns occupy space in American art and music and law so pervasively, they are easy to miss but also impossible to ignore.

Iowa has a historically strong gun culture. For all U.S. states, it is ranked twenty-first for household gun ownership rate (Quartz 2015: n.p.). Of all guns, handgun ownership appears to be on the rise (Hemenway 2004: 7). Handgun ownership and possession can entail numerous activities of a passive nature, including collecting, gift acceptance, exhibiting, or generational inheritance. Handgun carrying is one of these many firearm activities. It is a more assertive action requiring forethought, energetic participation, and potential, anticipatory behavior in response to others' behavior. Handgun carrying is part of a gun social movement across the America and Iowa. Americans appear more uncertain of their safety and future. Uncertainty and fear are changing our culture and private citizens are seeking refuge by arming themselves. This armament has produced more liberalized gun legislation (U.S. Government Accounting Office 2012: n.p.). Iowans are weaponizing themselves as well and they are doing so as evidenced by securing more handgun permits to carry.

Over the past few decades, an increasing number of scholars have shown a split between rural and urban gun ownership, possession, and the chances of severe injury when

guns are used in violent situations (Peek-Asa, Zwerling, and Stallones 2004: 1691; Slovak and Singer 2002: 52; Hepburn, et al. 2007: n.p.; Schnebly 2002: 391; Hemenway 2004: 6, 35). It is possible that Iowa shows no exception to this rule. But, the Iowa culturally-based, gun landscape is in fact more complex than the traditional rural-urban split. Using Iowa as a case study, this work examines Iowa gun culture and its handgun carrying through the lens of some of its various rural and urban subdivisions. This work reveals there are four distinct and sufficiently articulated social and cultural settings and differences between these four environments extend to differential handgun permit to carry rates by year and over time.

As I investigate the association between handgun permit to carry issuance rates and Iowa county types, I illuminate the distinctive, handgun-carrying-in-public differences across Iowa social and cultural settings. I provide evidence of a nuanced Iowa gun culture. The findings, in accordance with socio-demographic variable cluster differences by county type, are indicators of why some counties have high handgun permit to carry issuance rates and others do not. I aggregated handgun permit issuance rates for 2010, 2011, and 2013 and used cross sectional and time series methods to test statistical significance by county type. I lay a foundation for additional handgun, social structure-based research in Iowa and beyond its cultural borders. Finally, I provide guidance to legislators, community leaders, and community members to understand how guns have become an important part of Iowa's economic, social, and political environment for just a few Iowans, while signifying that most Iowans do not engage in the assertive and aggressive handgun-carrying-in-public activity.

This study breaks new ground as handgun laws may influence different groups in different settings. This must be understood in context within each unique social setting. The

Iowa, Department of Public Safety, controls access to handgun permit to carry data and no other individual has asked for these data. Therefore, no previous study of Iowa handgun permits has examined the association between handgun permits before, during, and after the 2011 handgun law enactment, or the association between various socio-demographic variable patterns in several different cultural and social settings and handgun permits to carry.

This study determines handgun permit to carry issuance rates for each of Iowa's ninety-nine counties. Quantitative statistical analysis separates Iowa's counties by degree of rurality and urbanization. The presence and intensity of certain socio-demographic variable clusters by county types provides a format and guidance for additional study in Iowa and other states' gun experiences. This study provides a historical perspective and the effect of state law change on handgun permit to carry rates by county type.

The remainder of this thesis is organized as follows: chapter 2 reviews America's gun history and gun culture; Iowa's gun culture; theoretical explanations for these gun cultures within rural and urban settings; and U.S. federal and Iowa state gun law. Chapter 3 sets out the quantitative methods used. Chapter 4 delineates the findings. Chapter 5 discusses implications for society, communities, government, gun law advocates and dissenters, and gun public policy.

CHAPTER TWO: LITERATURE REVIEW

“It is well to observe the force and effect and consequences of discoveries.” – Francis Bacon in *Novum Organum* (1620)

A Portrait of Gun Culture in the United States

Americans’ core values include liberty, freedom, individualism, and a pluralistic democracy. Guns are evaluated and observed to be protectors of these values. Guns as possessions and their various uses seem to represent and effectuate all of these values. Given their strong association and construction as carriers of this cluster of core values, guns are able to transcend destructive uses and results, such as mass murders and childhood accidental death by firearm. Political action and resultant public policy meant to curb these deleterious results go by the wayside as well. At best, these tend to simply nibble a bit at the edges that surround gun rights. To some, guns are cultural objects symbolizing our country’s identity, and its separation from other countries, as these countries attempt to suppress and control its citizenry via gun control policies. Guns and their effect are omnipresence, found within our culture’s social institutions and their importance is communicated effectively and efficiently informally and formally. Once again, their presence might be easy to miss but impossible to ignore.

Take Americans’ beliefs about guns and security: many Americans believe guns are necessary for survival or a product of “defensive attitudes” (Dixon and Lizotte 1987: 395). These defensive attitudes correlate positively with “rural dwellers and white males, and not black males” (Dixon and Lizotte 1987: 398, 399). Some research findings indicate that guns are used by law-abiding citizens to defend themselves against potential criminal activity. Lott and Mustard (1997: 25) maintain that:

“adopting concealed handgun laws in those states currently without them would have reduced 1992 murders by 1,839, rapes by 3,727, aggravated assaults by 10,990, robberies by 61,064, burglaries by 112,665, larcenies by 93,274, and auto thefts by 41,512. The total value of this reduction in crime in 1992 dollars would have been \$7.02 billion.”

This totals over 325,000 preventable index crimes. Lott and Mustard’s numbers increase in others’ hands to a few million, defensive, gun-use incidents annually (Utter and True 2000: 70). Beyond personal safety, some advocates argue that America’s economic and social successes have been partially a result of the individual’s right to bear arms. Guns, they say, ensure a balance of power between state and individual rights and the federal government and offset the potential for a too-powerful, oppressive, and centralized standing army.

Conversely, gun control advocates denounce what may appear to be the gun’s cultural centrality and the economic strength of gun rights organizations. In 2012, the top six gun rights groups’ tax filings show \$301 million in revenue, whereas the top six, gun control groups’ tax filings revealed just \$16 million (McDaniel, Griner, and Krebs 2014: n.p.). Gun right activists may find this disparity necessary as periodic surveys and polls show some of the American public’s concern about lax gun laws. A 2012 Gallop poll indicated that eighty-three percent of those polled expressed a strong desire for background checks prior to all gun purchases; a majority would vote in favor of the reinstatement and strengthening of the ban on assault weapons previously in place between 1994 and 2004; and a majority would vote in favor of limiting the sale of ammunition magazines to ten rounds or less (Gallup 2013: n.p.). One Gallup poll taken about one month and another four to five months after the Newtown, Connecticut shooting of twenty elementary school children and five school employees reflected a very high percentage of Americans favoring stricter gun laws. But an October 2014 poll indicated that

Americans were changing their minds about gun law. In 2013, when asked if firearms laws should be made stricter, less strict, or kept as they are, fifty-eight percent answered “more strict” (Gallup 2014: n.p.). In the 2014 poll, just forty-seven percent answered “more strict”. Obviously, over time, some public ambivalence regarding gun law can be detected. In other cases, public acceptance of some gun activity (e.g. possession) has been steadily increasing. In 1959, thirty-six percent believed handgun possession should be banned (Swift 2014: n.p.). But, in 2014, a record high, seventy-three percent of Americans felt that handgun possession should not be banned (Swift, 2014: n.p.). In 2004, sixty percent favored stricter gun law; this fell to forty-four percent in 2009 (Swift 2014: n.p.). The percentage favoring less strict gun law has remained low between 2000 and 2015, vacillating between five and fourteen percent (Swift 2014: n.p.). In the end, Americans seem to alter their gun law views back and forth over time. Mass shootings influence their view, appearing to contribute to a stricter gun law viewpoint for the moment. However, this view seems to fade, even in the face of continued mass killings by firearms, as time passes.

Meanwhile, the U.S. gun industry’s \$12-billion-per-year operation advertises to all, whether male or female, and boys and girls of all ages. Such marketing contributes to an affinity for gun possession; meanwhile, manufacturers protect themselves from liability. The enactment of the Protection of Lawful Commerce in Arms Act of 2005, which provides gun makers and distributors immunity from liability lawsuits, is a prime example. The industry also has a strong and vocal pro-gun legislative lobby and supports other well-organized pro-gun organizations such as the National Rifle Association (NRA). Robust political partnerships (e.g., U.S. senators, gun manufacturers, and law enforcement officers have been or are members of

the National Rifle Association's seventy-six-member Board of Directors) are formed and maintained to perpetuate a pro-gun public policy environment. In Iowa, organizations such as Iowa Gun Owners, the Iowa Firearms Coalition, and the in-state Iowa NRA affiliate ensure their voices are heard by legislators, the Iowa legislature's committee chairs, and majority and minority leaders in the Iowa legislature, finding time to berate gun control advocates in each chamber and orchestrate attempts to remove those labeled as such from office. Even those legislators with a moderate view, and some advocating increased gun rights, are vilified via social media by some of the aforementioned gun rights groups.

Guns' presence has been and continues to be so omnipresent that we can find guns' virtue extolled in American music, movies, and popular television programming. The benevolent essence of "It's Beginning to Look a Lot Like Christmas", by the American composer Meredith Willson, is not compromised by the line in the song in which children wish for a handgun as a gift for Christmas. The 1947 film *Unconquered*, directed by Cecil B. DeMille, one of the founding fathers of Hollywood, starred Gary Cooper efficiently brandishing an original swivel-barrel rifle, smooth-bore combination made by an eighteenth-century German gunsmith (James 2011: n.p.). Other weapons, including two Kuchenuiter flint pistols used by protagonist Howard De Silva, came from DeMille's own gun collection (James 2011: n.p.). Other movies in which various handheld firearms were integral include *Enemy of the Gates* (2001, directed by John Scholfield) and *The Wind and the Lion* (1975, directed by John Milas). Popular television shows of the twentieth century included *Gunsmoke*, *Have Gun Will Travel*, *Rawhide*, and the *Rifleman*. In each of these series, new small-screen stars were born with a handgun on their hip or cradled in their hand. More recently, the Discovery Channel aired the reality shows *American*

Guns and Sons of Guns. And, entire genres such as action films and crime/police dramas are based on the deadly use of guns. The characters in these films and weekly shows became and become household heroes, glorified for their slick handgun and rifle skills, while demonstrating in most cases good judgment (i.e., as defined by the public at that time in history) in their use. As a result of these positive images and other social factors, death by firearm may seem to have become, or may be becoming, a more socially acceptable, necessary, and justifiable method of solving disputes and coping with life challenges in America.

In this context, we find the United States has one of the highest firearm death rates in the world (Krug et al. 1998: 214). Since 1987, more Americans have died from nonmilitary use of firearms than died in World War I, World War II, the Korean War, Vietnam, and all other conflicts since Vietnam (Kristof 2015: n.p.). Studies have shown that household gun availability is a risk factor for suicide and homicide (Miller et al. 2006: 178; Hemenway 2011: 1142). Miller et al. (2015: 116), Lewiecki and Miller (2013: 28), and Ajdacic-Gross et al. (2008: 1752) have shown that gun availability is regarded as a critically important factor in suicide method determination, suicide rate, and suicide prevention in the general population. Florentine and Crane (2010: 1631) and Daigle (2005: 630) have concluded that “limiting access to means of suicide is likely to remain an essential component of suicide prevention”. Geographic areas with high rates of firearm ownership are particularly susceptible to higher suicide rates and suicide by firearm (Miller et al. 2015: 119). Monuteaux et al. (2015: 1) has shown that an increase in gun ownership leads to a higher gun homicide rate. As a matter of fact, between 1980 and 2008, homicides were most often committed with handguns (U.S. Department of Justice 2010: 27). The World Health Organization (2008: n.p.) affirms the high incidence of handgun use as

well, noting that the United States leads the world in gun suicides. Moreover, close to half of all accidental shootings in the United States occur in the home with forty-nine percent of the victims under the age of twenty-five and eighty-one percent of the shooters under that age (Hemenway 2010: 1186). Between 1965 and 2006, over 64,000 Americans died from unintentional firearm shootings, more Americans than were killed in our wars during the same period (Hemenway, 2010: 1184).

Given its efficient and effective nature, when a person is injured by firearm, the event itself may eventually lead to death (Miller et al. 2004: 725; Wells and Horney 2002: 288). More than eighty percent of gun-related deaths are pronounced at the scene or in the emergency department; the wounds are simply not survivable in many cases (Wintemute 2008: 1421). When used by a single individual, no other method is quite as efficient, compared to other methods (Shenassa, Catlin, and Buka 2000: 482; Shenassa, Catlin, and Buka 2003: 123).

These studies' findings lend credibility to the Weapons Instrumentality Effect, or the view that the presence of guns alone correlates with homicide (Felson and Messner 1996: 519). The Weapon Instrumentality Effect also posits use of firearms increases the possibility of death compared to alternative weapons (Wells and Horney 2002: 287, 290, 291).

Firearms may promote violent crime. These can be used to engage many victims quickly, sequentially, or at the same time and wound or kill from short and long distances. In their study of probationers with felony convictions, Wells and Chermak (2011: 2143) discovered that "involvement in gun crimes is linked to an increased risk of gun victimization". Altheimer also (2008: 12) postulated a direct association between gun availability and serious injury or death. Lippman (2010: 14) noted "the deaths, injuries, and disabilities (by guns) significantly escalate

healthcare costs, insurance premiums, criminal justice system expenses, and taxes.” Lippman (2010: 15) noted: “Five times as many women are shot to death in homes where such weaponry is available in contrast to households without them”.

Accordingly, paraphrasing Lippman (2010: 15), our society has accepted “(gun) bloodshed as part of our culture”. Our culture has been described as a unique American gun culture as other nations have sought to maintain or establish different public policy and gun-direction to avoid our gun troubles (Chapman 1996: 10). Our unique American gun culture and its violence occurs as “neither guns nor people exist in isolation from social or historical influences” (Metzl and MacLeish 2015: 246). In this manner, it appears that “gun violence in all its forms has a social context” (Metzl and MacLeish 2015: 246), perhaps including firearm-related crimes, gun violence in general, access-to-gun public policy, and social networks in which “guns and people come together in particularly destructive ways” (Metzl and MacLeish 2015: 246). As a result, public health researchers, community leaders, politicians, government officials, and pro and anti-gun advocates’ arguments explaining the strong relationship between handguns and suicide, homicide, and other destructive firearm behavior requires insight that “social and economic formations”, in addition to “fear and complex anxieties”, are involved and remedies should take this into consideration (Metzl and MacLeish 2015: 246).

Guns represent shows of power. They have been used to suppress organized crime and crime waves as well as labor disputes, urban riots, and disenfranchised groups. Guns have been the first line of defense (or offense) for expediency’s sake if allowed by law, as in “Stand Your Ground” laws. The 2011 George Zimmerman-Trayvon Martin case comes to mind. Some maintain Zimmerman used Florida’s Stand Your Ground law to defend his killing of Martin, an

unarmed African American youth, who Zimmerman maintained was suspicious, potentially dangerous, and a criminal threat to Zimmerman's neighborhood. Others note that Zimmerman used a self-defense rationale.

Today, it is worth investigating whether the old reasons Americans have given for owning and using guns may be unsupported by current political, economic, technological, and social conditions. What are these old reasons?

Historical Foundation for American Gun Culture

Guns have always had a strong presence in America culture and history (Kennett and Anderson 1975: 1). Accordingly, it is frequently said that America has a "gun culture" within it (Hofstadter 1970: 4). Others make a distinction and claim that American culture itself is a gun culture (Lott 2000: 1). For Robert Spitzer (1995: 8), the American gun culture is founded upon (1) "the propagation of firearms from the nation's earliest stages, (2) the link between personal weapons ownership/possession and the mid-to-late-eighteenth and early nineteenth-century conflicts with Great Britain, (3) the westward expansionary activities across the North American frontier from the seventeenth through the nineteenth century, and (4) a cultural mythology relating the gun in frontier life with modernity."

American gun culture exists historically as a product of several historical movements. One of the Revolutionary-era foundational moments, as Kopel (2012: 327) has argued, occurred when Great Britain's King George III began a gun-control program for the confiscation of colonists' firearms and gunpowder and banned the importation of the same. This generated fears of potential armed enforcement by the British army of the 1774 British Parliament's Coercive Acts or Intolerable Acts. These actions and events were instrumental in the

development of a sentiment and strong desire to offset the potential for government violence that Kopel (2012: 286) maintains “should always be carefully constrained and controlled” and “discouraged when it is used to take firearms away from peaceable citizens”. In accordance with these events, eighteenth century public policy reflected a resolve to meet British, armed violence to enforce unfair laws with armed violence (Kopel 2012: 289). Kopel (2012: 287) takes the view that the American population also feared that their own government could utilize the military for law enforcement purposes, and these fears remain due to present day perceptions that abuses of second amendment and “self-government” rights do, in fact, occur.

A second influential moment in American history came during reconstruction after the Civil War, when the U.S. Congress interpreted and intended the Fourteenth Amendment be applied to states in accordance with the Bill of Rights’ Second Amendment right to bear arms on an individual basis to ensure local governments would not infringe upon an individual’s right to bear arms. Third, nineteenth-century, local and state officials began to respond to individual and group lawlessness with gun control ordinances and laws as Great Plains states began to establish small towns and cities. Legal challenges by individuals to state and local gun control efforts, in some locations to include open and concealed carry, were generally rebuffed by judicial decisions. These developments can be viewed as part of our gun culture’s history; handguns were plentiful and did at times have a destructive effect, and citizens were aware of this and the ordinances and statutes enacted, along with the establishment of law enforcement entities, were able to offset some of this effect (Slotkin 2013: n.p.). Fourth, there have been instances in which government as a superior force representing the economically advantaged suppressed the individual right of the working class to bear arms (e.g., the Illinois armed public

parade law disallowing firearms later affirmed by the U.S. Supreme Court in 1886 in *Presser v. Illinois*).

The seventeenth, eighteenth, and nineteenth centuries also witnessed massive westward migrations by European and then American settlers. Liberty, providence, patriotism, justice, freedom, and self-government were offered and can be found in nineteenth-century political commentary justifying the westward expansion (the “Manifest Destiny”) of the United States (O’Sullivan 1845: 5). Guns were part of America’s cultural expression of frontier life and were integral to efforts to expand, dominate, and control new territory and their inhabitants beyond the Appalachians, the Mississippi River, and across the southwestern and northwestern North American frontiers. Western frontier folklore has produced stories of survival, violence, self-reliance, equality, independence, democratic individualism and self-government, the “warlike Christian man...destined to be the Scotch-Irishman...altogether too restless to have his abode within the space of two hundred acres” (Turner 1920: n.p.); and defense of communities as well as gunfights, shootouts, range wars, banditry, and family feuds—all facilitated by firearms, firearm mythology, and hyperbole (Slotkin 2013: n.p.). Those in favor of gun right preservation or expansion incorporate these American and historical “gun-slinger settler” images, “romanticizing subjugation and bloodshed”, and equating these with our American core cultural values, to explain the need for guns and “the need to place oneself in relation to meaningful events in the past that lead up to the present” (Slotkin 2013: n.p.). In this sense, Slotkin (2013: n.p.) maintains that the “gun is a symbol of productive violence in our history...with magical properties”.

Slotkin (2013: n.p.) describes America's two and one half centuries as founded on the myth that "violence is an essential and necessary part of the process through which American society was established and through which its democratic values are defended and enforced; invoking violence because we think it not only saves us but nurtures us and that we have some kind of obligation to use it in the service of spreading democratic values."

Theoretical Foundation for American Gun Culture: The Case for European and British-American Cultural-Gun Association

The theoretical foundation explaining America's understanding and use of the gun might begin with its historically European and British cultural influences. This explanation is partially based upon David Hackett Fischer's insights regarding the four British subcultures introduced to America by settlers between 1639 and 1775. Fischer studied Sumner's folkway observations and their distinctive customs. Emphasizing relativism, Sumner maintained that each group had its own folkways, customs, mores, and institutions. He conceptualized these as group habits best suited to a specific condition or circumstance. Fischer maintained that Puritans, Royalist elites, Quakers, and Backcountry settlers comprised four cultures that traveled from England to the American Colonies of New England, the mid-Atlantic, the Delaware Valley (Pennsylvania), and the Appalachian backcountry regions, respectively. Focusing on Backcountry settlers, Cowan (1992: 167) supports Fischer's subcultural folkways construction, finding it "convincing", and recognizes a variety, but not all of descriptions for the Backcountry subculture's ways of living, as an accurate reflection of lower, borderland Scotland's culture's transference to America. Waller (1992: 176-177), while disagreeing with Fischer's overarching assessment of "borderers" culture, approves of Fischer's meticulous descriptions of the four English

subcultures and their “origins, material culture, and value systems”, citing the “logical presentation”, and of great importance, the legitimacy of the subcultures’ “regional origins”. Waller (1992: 179) emphasizes, and therefore, in essence, argues along with Fischer, that “culture is a function of power”. Waller (1992: 179) adds that “cultural survival is based on...the ability to create and control economic, social, and cultural institutions in a region”. Scotch-Irish settlers experienced economic isolation across the frontier, in eighteenth century Appalachia, yet bonded through “family, kin, ethnicity, land, and congregation” as they migrated northwest (Hofstra 1997: 181, 187, 188). Have these attributes survived in southwestern, rural Iowa?

I maintain that handgun permit to carry and any legislative or court decision liberalizing gun law or increasing gun rights are measures answering these questions based upon the perception that firearm ownership and other activities are of greater interest to the most rural and isolated populations in Iowa, much of which is found in southern and southwest Iowa. In my mind, Fischer’s contention that the Scott-Irish, backcountry, borderland subculture settled in southern Iowa is reinforced by the need to improve their economic position. Their settlement in Appalachia did not facilitate their economics, noting the limiting mountainous topography. Iowa provided not just low cost or free farmland, but some of the best soil to be farmed in the world. Migrating across the Ohio River to the Ohio Valley and then into the frontier states of Indiana, Illinois, and Iowa; traveling west via the Ohio River and up the Mississippi to Keokuk, Burlington, and Ft. Madison; or moving north through Missouri to Iowa, made economic sense. Waller (1992: 179) notes Fischer’s position that Quakers, Puritans, and Cavaliers immigrated for non-secular reasons, whereas backcountry, borderlanders immigrated to offset poverty, a dearth of economic opportunity, and for materialist reasons. In his critique

of Fischer's depiction of this transmission of Scotch-Irish culture, Cowan (1992: 170) supports Fischer's assessment that a subculture's participants can strive to, and perhaps be successful in an attempt to perpetuate their way of life. Cowan (1992: 170) wrote:

“a very large number of emigrants were motivated by a desire to preserve a world or a way of life which they perceived to be in process of disintegration. They were thus conservative and clung to cultures which in the nature of things would otherwise have disappeared, across the whole spectrum from feud to faith”.

Fischer encapsulates freedom in juxtaposition with religion and religious freedom.

Cowan noted Scottish geography facilitated the senses of freedom and independence. Iowa's rural geography and its Protestant religious orientation correlate with a fierce need for freedom and independence; once again reflected in Fischer's folkways or life-ways. The need for independence, “the importance of human reason, and a rejection of any authority that could not be justified by reason” (i.e., in accordance with religious freedom, liberty, democratic institutions, and reason “as the primary source of legitimacy”) are observed as pillars of Scottish Enlightenment thought; appearing to be within the realm of “humans are naturally implanted with a variety of foundational common sense beliefs about the world” (Fieser 2000: VII). Could it be that Iowa's far-southern, rural inhabitants continue to fight against government for freedom and independence via their pro-gun views and behavior and associated political and religious views and activities? Could these be reflected in higher handgun permit to carry issuance rates?

Cowan (1992: 171) advanced “a distinctive Scottish tradition of political thought; the truth of the long saga of the Scottish question for freedom may be held to be self-evident”.

Fisher advanced trait similarities and differences between these four hearth cultures. Those in

common included the English language, Protestantism, British law, and British liberty (Fischer 1989: 6). Some of their differences revolved around religion, understandings of social rank, social hierarchy, and social structure (Fischer 1989: 6, 10, 11). Fischer considered two of these four cultures, New England Puritanism and Midland Quakerism, as having “northern” ways. These two cultures dominated much of the northern colonies’ social institutions, pervading modernist, city-centered, industrial, and communitarian orientations as the flourishing nation spread westward. Civic accomplishments, industrial success, and piety were emphasized and cherished within these Puritan and Quaker cultures (Krier, Stockner, and Lasley 2012: 58).

Fischer claimed that these British folkways provided a framework for American regional cultures, including perceptions of power, order, independence, liberty, and freedom. Indeed, Fischer (1989: 7) asserted the accuracy of Sumners’ view that these regional cultures have maintained their unique folkways, or “habitual usages, manners, customs, mores, and morals - practiced more or less unconsciously” as critical building blocks for simple or complex cultures. Fisher (1989: 7) maintained that folkways were normative in nature, made up of precursor, socially, and intellectually derived values and meanings found within cultures.

British folkways have produced an “expansive pluralism,” more “libertarian than any unitary culture alone could be” (Fischer 1989: 7). Although American cultural identities may have diverged, the sense of liberty has remained strong over the centuries. Fischer posited that this is possible because folkway concentration intensifies in technologically advanced societies. As a society advances materially, Fischer argued, folkways’ power become more intense as “modern technologies amplify this condition and modern institutions stabilize it” and that “modern elites...act as organizers” to solidify folkway values (Fischer 1989: 10). In this light, the

cultural value, the need, and the sense of liberty grew as gun technology advanced. As these relationships grew, the gun solidified itself as a tool of culture.

Guns, as instruments of culture, are included to varying degrees in American culture's value systems and folkways (Slotkin 2013: n.p.). Gun culture is advanced culturally, socially, politically, and economically via gun-related legislation, gun interest-group competition for resources and membership, and the development of pro and antigun subcultures. How pro- and antigun interest groups describe one another in popular gun-related websites and other publications also illustrate gun culture. Finally, American gun culture can be measured by gun-focused political advertisements and public service announcements, gun-related lobbying efforts, "popular literature, the gun and ammunition industry's economic posture, and other markers (Utter and True 2000: 75).

The Fischer-inspired explanation of the hearth cultures and their folkways or customs suggest how and why firearms are integral to rural America, but rural areas in particular are best understood through the backcountry culture, and to some degree, its guns. Ward (2007: 249) supports Fischer's contention that the backcountry, Scotch-Irish culture was more "boisterous neighbors"; more prone to "clash and brawl"; and did not "display the same regard for authority and deference" as other settlers in their settlement and relationships in the Delaware valley in the eighteenth century.

As earlier stated, many Scotch-Irish migrated as well to Missouri and Iowa. Prior to their westward movement though, the same Pennsylvania Scotch-Irish moved from southern Pennsylvania into Virginia and North Carolina, then Kentucky and Tennessee. The Virginia "Valley Route" from Pennsylvania soon became known as "Irish Road" due to the large number

of Scotch-Irish emigrating to the Virginia's Great Valley (Gerlach 1997: 149). Those migrating beyond the Appalachians to the Mississippi River Valley and Missouri River Valley began doing so in the late 18th and early 19th century. This migration continued well into the mid-19th century. They migrated from the mid-south north, west, and northwest, commonly using the Ohio River to guide them due to a variety of reasons, including economics, a concern for egalitarian treatment for all, and a nomadic lifestyle (Gerlach 1997: 148). Described by Gerlach (1997: 146) as more of an "ethnic culture" and not an "ethnic group", this diverse and difficult to categorize ethnic culture was accustomed to a frontier lifestyle and mentality and angering those native to the land heretofore unoccupied by the Scotch-Irish (Blethen and Wood 1997: 1; Green 1969: ix). One of the more salient aspects of this culture, classified by Gerlach as "low culture", was its egalitarian sentiment. This was reflected in its aversion to racial slavery and its migration from the south to avoid anti-egalitarian activity and thought. The term "low culture" was used by Gerlach, at the very least, in recognition of some of the differences between the egalitarian, "low culture" Scotch-Irish and the slave-holding, "high-culture" Scotch-Irish (Gerlach 1997: 154).

As the "most visible institution and an essential characteristic of any rural people...the ways in which they settled and used the land" (Blethen and Wood 1997: 213), for the Scotch-Irish Presbyterians who found racial slavery to be inconsistent with their religious thought and practice, the South's slave practices provided some impetus for the Scotch-Irish to move north to Ohio to actively participate in the North's war efforts against slavery and the newly formed Confederacy. Another segment of the Scotch-Irish ethnic group were slave holders (Gerlach 1997: 154). This group may or may not have settled in southern Iowa. Instead, if migrating

west, this group may have settled more often in southern Missouri. Once again, Gerlach refers to this group as “high-culture” Scotch-Irish. In general, these Presbyterian or Ulster Scots tended to be fiercely independent and clannish, seeking local control of economic concerns (Hofstra 2004: 168). Their nomadic movement may have allowed them to remain independent and their clannish nature may have worked to their advantage in their attempts to control local economics.

Westerkamp’s (1988: 16) work sketches the origins of Presbyterian revivalism in Scotland; supporting Fischer’s specific conclusion that ritual continuity existed between the Presbyterian churches of Scotland and Ulster and Delaware Valley Scotch-Irish Presbyterians and the general conclusion that the Appalachian cultural, religious customs, folkways, and practices were in large part a product of a Presbyterian religious culture or the “theology of Protestant fundamentalism” from the “borderlands of North Britain” (Fischer 1989: 708). As they moved across the mid-east to frontier states, including Iowa, they brought the Presbyterian church and its customs, as well as a defiance of outside control, unjust decrees, and domination as experienced from the Church of England’s highly structured hierarchy and perceived persecution and oppressive practices, as well as the “brutal suppression of rebellions by the British army” and “the British Parliament outlawing many of their traditions and institutions (Taylor 2003: 252).

This work requires some limit, but Taylor’s mention of the British suppression of the borderlanders’ culture could use some illumination. From about 843 until 1707, a Kingdom of Scotland existed. 1707 marked the year that the Kingdom of Scotland and the Kingdom of England were unified. During the aforementioned timeframe, the Kingdoms fought several

dozen battles, many along the Anglo-Scot border, with great loss of life. Two quotes may enhance our understanding of the fiercely brutal and violent nature of these wars and battles, the separation between these two peoples into two distinct cultures, and perhaps the mind-set and behavioral orientation of the Scotch-Irish as they defended their land and way of life.

Ferguson (1977: 61) wrote of the savagery of the war known as the Rough Wooing (1543-1551):

“English policy was simply to pulverise Scotland, to beat her either into acquiescence or out of existence, and Hertford's campaigns resemble nothing so much as Nazi total warfare, "blitzkrieg", reign of terror, extermination of all resisters, the encouragement of collaborators, and so on.”

Sadler (2005: 1) quoted Stevenson in *Essays of Travel*:

“Here are two people almost identical in blood...the same in language and religion; and yet a few years of quarrelsome isolation – in comparison with the great historical cycle – have so separated their thoughts and ways, that not unions nor mutual dangers, not steamers or railways, nor all the king's horses and all the king's men seem able to obliterate the broad distinction.”

No doubt as time passed the influence of the Scotch-Irish culture has attenuated in most every social sense for “dispersed settlement” based in “individualism” was not unique to their ethnic culture (Blethen and Wood 1997: 221). It certainly has not been as successful as some other subcultures' attempts to sustain subculture in Iowa, such as a few, isolated, and small Mennonite communities in Kalona, Bloomfield, and Buchanan County, Iowa. Having frequently visited Kalona, and noting Wick's (1894: 15, 35, 42) delineation of various Mennonite norms, customs, and practices, I have found dominant culture assimilation, especially in the business and retail sectors, and yet a strong obedience to some Amish traditions and behavior, such as clothing worn and the use of the horse and wagon transportation.

Fischer's contends that the two most southern Iowa county tiers were settled primarily by the southern, backcountry, Scotch-Irish. Scholars locate this geographic area as just north of the Southern Highlands, which stops at the Missouri-Iowa border. The presence of the most radically independent and conservative Presbyterian church in remote, rural locations in Iowa, including points in southwestern Iowa, lends to the position that backcountry, Scotch-Irish culture was transmitted to this area via nineteenth and twentieth century, Scotch-Irish immigration.

Shaped by a "small local community, with little direct interference from outside their local neighborhood", backcountry "settlement patterns limited connections with a wider society" and produced "little direct contact with the broader Atlantic economy" (Ward 2007: 249). "Open-country neighborhoods" were formed characterized by "farmsteads located about a half a mile apart" (Ward 2007: 249). Today, over ninety-six percent of Iowa's land remains country-side. Low population density was characteristic of the backcountry culture, whether it is in Appalachia or the many, frontier-like, remote Iowa counties (Ward 2007: 249). Thus, cultural independence and folkway stability are much more sustainable in these areas.

Accordingly, these settlers tended to associate most of the time with others within their subculture, increasing their isolation and insulating them from others also fostered by the settlements' geographic distance from government and urban centers (Ward 2007: 249; Fischer 1989: 650). They strove for "self-control of their economic affairs", were "politically disputatious, adroit, inept at governing and nearly impossible to govern", and with low population density and living great distances from urban centers an enhanced need for self-sufficiency and independence from government services and interference sustained (Ward

2007: 250; Blethen and Wood 1997: 221, 222). This phenomenon is evident in present-day Iowa with much of rural Iowa a far distance from most centers of urban population. Southern Iowa counties can be over one hundred miles from a USDA-classified urban city. This isolation from others may have been attractive to the culture and sustained Scotch-Irish immigration to Iowa from the east as it remained heavy well into mid-nineteenth century. By 1870, only seven other states had more foreign-born Scotsmen than Iowa (Hull 1888: xxvii).

The Scotch-Irish were accustomed to transiency while clearing and defending their land, living “the life of the frontier”, ripe for the development of lawlessness, free enterprise, and inventiveness” (Evans 1969: 74; Fischer 1989: 759). In the mid-to-late eighteenth century, the Scotch-Irish began migrating south into Virginia, North Carolina, South Carolina, what is now West Virginia, and beyond. As frontier settlement moved inland, some migrated across the Ohio River into the Alleghany Plateau in the newly established Northwest Territory. Others negotiated the various ranges (e.g. the Great Smokies and the Cumberland Mountains) of the Appalachian Mountains into Kentucky, Georgia, and Tennessee. Turner (1920: n.p.) described the “backwoodsmen” migration as “in assertion of the right to independent self government and in a frontier separatism” (Turner 1920: n.p.). Gerlach (1997: 146) noted that “by 1800, the time at which settlement west of the Mississippi River was beginning, there is little doubt that a substantial proportion of settlers trekking west from the Appalachians, and particularly those on the leading edge of the frontier, were of Scotch-Irish descent.” It was at this point in time that the gun skills learned through armed conflicts (e.g. Seven Years’ War) began to move across the Appalachians and the Mississippi River with settlers, including the Scotch-Irish. This and other aspects of their culture, including speech-ways (i.e. some claim that it “preserves the

“Queen’s English” or as “Shakespearean”), religion-ways (i.e. fundamentalist Presbyterian), kinship-ways (e.g. consanguinity), family-ways (e.g. marriage-partner decision), ethnicity-ways (e.g. a “local social order of scattered family homesteads congenial to their experiences and expectations”), land-ways (e.g. land inheritance), economic-ways (i.e., geographic isolation correlated with a local economy that did not disrupt the community structure), came with them (Montgomery 1997: 189, 192; Hofstra 1997: 177-179; Blethen and Wood 1997: 226).

Gerlach (1997: 147) supports the view that the Scotch-Irish culture was transmitted to the southern backcountry (from the Delaware Valley) and has been a part of the creation of the American frontier state culture. Gerlach and the aforementioned scholars also instruct this culture’s emphasis on the private nature and individualization of its participants. They maintain that a culture’s folkways, norms, and belief systems can transcend migration movements, even over large geographic spaces. Immigrants as members of large communities can sustain culture and this facilitates an analysis of relationships within and between ethnic groups. Within this analytic process, we conclude the Scott-Irish, to some degree and just as other groups, interpret and organize their world from a historical and social perspective, somewhat divergent from others.

Fischer (1989: 833), notes that linguistic geographers discovered four major dialect regions in the continental United States...these are the areas in which the four English folkways expanded after independence”. The “highland southern” dialect, distinct from the northern, midland, and coastal south dialects, emanated in Appalachia and traveled to Iowa along with aspects of “material culture, vernacular architecture, onomastic customs, and folklore” as segments of the backcountry regional culture (Fischer 1989: 833, 834). Accordingly, Fischer

concludes that southern Iowa was settled by the Scotch-Irish, backcountry subculture.

Gerlach's (1997: 158) work contributes to this view instructing that a significant number of Scotch-Irish settlers were able to have a "dominant cultural influence" in significantly large areas west of the Mississippi River, "possessing an identifiable 'critical mass' of historical culture traits that set them apart from most other groups". Young (1989: 300) notes research associating Protestantism and a "frontier ethnic heritage" to support "a cultural model" to explain high rates of gun ownership. Again, Ward (2007: 248) supports Fischer's description of the Scotch-Irish subculture as independent, plagued with "frequent interracial violence and brutality", and favoring a non-hierarchical structured Presbyterian Church and rejection of outside interference from church and government, and isolated from other subcultures. Lee (2006: 311) notes the saliency of investigating the relationship between conservative Protestantism and a violence-prone culture and a tendency toward "defensive and punitive violence". Lee (2006: 311) notes that other scholars (Ellison 1991: 1233; Ellison, Burr, and McCall 2003: 326; Borg 1997: 25, 41) instruct that violent attitudes and punitiveness correlate positively; "fundamentalist religious orientations...predict support for capital punishment"; "violent attitudes and interpersonal violence are linked to some aspects of regional religious culture"; and "disproportionate rates of violence" correlate with "the density of conservative/evangelical Protestants". Hepburn's (2007: n.p.) recent description of those most likely to own a gun shows that middle-aged, white males, living in rural, Midwestern regions of the country, with middle to higher income, growing up with guns in the home, dominate. Glaeser and Spencer (1998: 458) add that gun ownership can "link (with) tastes for violent retribution" and "private justice still dominates public protection", consistent with "community

norms”; a “suspicion of the courts”; and “represent a means of privately defining property rights”. This trait pattern fits rather well with Fischer, Young, Blethen, Gerlach, Bardon, Westerkamp, Montgomery, Green, and Hofstra, and the U.S. Census Bureau and State of Iowa Census findings and geographic and cultural contentions.

American Gun Culture and Social Conditions

I have described in brief some of the social conditions in which American gun culture exists today; this section goes into greater detail. It is important to note that the available data about guns is not necessarily comprehensive. Accurate measurement of firearm ownership is difficult and proxies have to be used. These include the number of per capita hunting licences, subscriptions to gun-related magazines, handgun purchasing license numbers, “Cook’s Index” (i.e., this technique uses the percent of homicides and suicides by guns), the percent of certain crimes committed by guns, rates of accidental firearm injuries, and the number of new, U.S. firearms manufactured (Hepburn and Hemenway 2004: 419). Historically, one of the primary sources for gun data was the U.S. Center for Disease Control. But this changed in 1996. In 2013, the Harvard University School of Public Health noted that the U.S. Centers for Disease Control and Prevention’s National Violent Death Reporting System covers only 18 states (Drexler 2011: 5). This system collects data from law enforcement and medical examiners’ reports and death certificates. This very limited data collection was a result of decreased funding precipitated by NRA lobbying that restricted CDC gun research if the research might enhance any gun control measure. As a result, CDC firearm research decreased by ninety-six percent. Incompleteness of available data notwithstanding, American gun culture is evident in

gun availability data, gun ownership and gun death statistics and in gun policies generated from other sources. It is also evident in gun carrying behavior (Felson and Pare 2010: 1357).

More recently, it is estimated that U.S. civilians possess about 101 guns for every one hundred persons in the United States. This figure places the United States as an outlier for developed countries/nations in the world. Yemen is the next closest with about 55 guns per one hundred persons; Switzerland has 46 per one hundred; Finland has 45; Cyprus 36; Saudi Arabia 35; Iraq 34; Uruguay 32; Canada 31; Austria, Iceland, and Germany 30; and Kuwait has 25 guns per one hundred persons (Geneva Graduate Institute of International Studies Small Arms Survey 2007: n.p.). The National Rifle Association's Firearms Fact Card of 2010 estimated that there were about 300 million privately owned firearms for a population of about 308 million persons. The ATF places the number of firearms at about 319 million as of 2010.

Gallup's annual crime poll for 2011 indicated that self-reported gun ownership was the highest it had been since 1993. While estimates of the number of guns purchased indicated a continued increase, household gun ownership had fallen from about fifty percent in the 1970s to about thirty-three percent of all households (Gallup 2011: n.p.). The same Gallup poll also revealed greater gun ownership by women, greater public support for individual gun rights, a 20 percent increase in gun ownership by Democrats and independents leaning Democratic, and regional increases in 2010 across the nation (Gallup 2011: n.p.). One observer estimates that an additional "three to six million firearms" are added to the national total annually (Legault 2008: 3) and a U.S. Department of Justice (2014: 5) estimation of a tripling of imported handguns from 711,000 in 2001 to 2.2 million in 2009.

No other developed country in the world has as many personal weapons of this nature, in raw frequency or in proportion to its population (Small Arms Survey 2010: n.p.). In a 2007 survey, the U.S. ranked first out of the 178 countries in the world surveyed in privately own guns per one-hundred population (Small Arms Survey 2007: n.p.). In fact, the U.S. far outdistances all other countries in the world in this area, with perhaps four to five times as many civilian firearms compared to India, the country with the next highest number (Small Arms Survey 2010: n.p.).¹ As of 2007, the top ten countries by total civilian weapons is provided.

1. United States of America (270,000,000)
2. India (46,000,000)
3. China (40,000,000)
4. Germany (25,000,000)
5. Pakistan (18,000,000)
6. Mexico (15,500,000)
7. Brazil (14,840,000)
8. Russia (12,750,000)
9. Yemen (11,500,000)
10. Thailand (10,000,000)
11. Others (186,410,000)

U.S. federal firearm law provides for differential state control and governance. This allows for both lenient and restrictive state control. Other factors of an informal nature also influence gun activities and the number of privately owned firearms, including criminal behavior. For a set of state gun laws to be classified as lenient, the licensing or permit-issuing authority is tasked with the responsibility of establishing whether an applicant be a member of a distinctive, prohibited group. In contrast, public gun policy can be classified as restrictive if

¹ These data include not just handguns, but pistols, semiautomatic pistols, short-barreled rifles, short-barreled shotguns, semiautomatic weapons, many military-style firearms that are portable-barreled, and machine guns that are legal with a class-three federal license.

this responsibility is shifted to the firearm applicant. In this case, many states require that the applicant must show good character and a valid reason to possess and carry a firearm.

America's gun culture has shown some movement toward a more permissive or lenient gun acquisition environment as more states become shall-issue, non-discretionary, gun permit-issuing states. Guis (2013: 266) has noted that this gun-law-type is "not very restrictive". In 2002, seven states prohibited the concealed carry of handguns/weapons (i.e., CCW). Since that time, the number of states prohibiting concealed carry permits has decreased (U.S. Government Accountability Office [GAO] 2013: n.p.). As of March 2012, only Illinois and the District of Columbia prohibited concealed handgun carrying (U.S. Government Accountability Office 2013: n.p.). Others point to other ways of measuring a potentially more permissive gun environment. For instance, some have argued that the passage of the U.S. Firearms Owner Protection Act of 1986, which revised many of the provisions of the Gun Control Act of 1968, is an indicator of a more permissive gun environment. Others (e.g. the NRA) have asserted that the ATF had been overstepping its authority and law abiding gun dealers were inappropriately prosecuted in federal criminal courts. A visit to the FBI Gun Laws and NICs (i.e., National Instant Criminal Background Check System) Information Center website shows that the number of background checks to buy a firearm has steadily increased from 9.1 million in 1999 to 23.1 million in 2015 (FBINICsystem 2016: n.p.). The National Instant Criminal Background Check System (NICS) is a federal system for determining eligibility to purchase a firearm in the United States of America; but some states do not participate in this reporting activity and may not be motivated to "transition to the NICS system" (FBINICsystem 2016: n.p.). Data reveal that the permissive gun environment continues to grow and several additional markers reveal this

trend: the number of U.S. gun-related deaths; the number of law enforcement officers killed by firearms; the number of permits to carry issued across the nation; and the number of weapons manufactured and sold, on an annual basis, have increased in recent past.

There are 1,251 licensed gun dealers in the Iowa, 1.5 times the number of post offices (U.S. Census Bureau: 2010: n.p.). From 2001 to 2009, the annual number of small arms manufactured in the United States almost doubled, from about 2.9 million to over 5.5 million; that number increased by over one million weapons between 2008 and 2009 alone (U.S. Department of Justice, Bureau of Alcohol, Tobacco, Firearms, and Explosives 2014: 2). As a result, along with China and Russia, the U.S. has been ranked as a “major” firearm manufacturer (Oxford University 2001: n.p.). Today, the number of handguns and other small arms firearms bought, sold, and now owned by private individuals in the United States is quite possibly more than 320 million, more than the approximately 316 million individuals residing in the United States as of 2013. The total number of deaths by firearm in the United States increased slightly more than 10 percent from 1999 to 2011 with 28,663 gun deaths in 2000 and 31,169 gun deaths in 2010 (National Vital Statistics Report: 2000: 10; National Vital Statistics Report: 2010: 20). In 2013, there were a total of 31,672 gun deaths in the United States (National Vital Statistics Report 2013: 2).

In 2010, the United States experienced 606 accidental firearm deaths (Law Center 2016: n.p.). “Where there are more guns, there are more accidental gun deaths” (Hemenway 2004: 28). States with more guns had nine times the unintentional firearm death rates than states with lower gun levels (Law Center 2016: n.p.). Hemenway (2004: 35) notes that “evidence suggests” that “rural unintentional fatalities are at least twice as high...as in nonrural areas”.

2014 CDC data indicates that two types of intentional injury deaths, suicide and homicide, rank consistently high from ten to sixty-four years of age. Nonfatal gun injuries have increased over seventeen percent in the last twelve years. For 2005, there were 69,825 nonfatal gun injuries (Curfman, Morrissey, and Drazen 2008: 1503). Adding these almost 70,000 injuries to the over 30,000 gun deaths, there were over 100,000 persons killed or injured by guns in just one year; representing one death every seventeen minutes and an injury or death every five minutes each day of the year (Curfman, Morrissey, and Drazen 2008: 1503). From 2001 to 2012, nonfatal gun injuries have increased from 63,012 to 81,396, increasing the rate per 100,000 persons by 17 percent (U.S. Centers for Disease Control 2013: n.p.). Indeed, the total number killed annually by firearms, intentionally or not, has increased almost sevenfold since 1963. One form of gun death, mass shootings and killings—although fairly common throughout the twentieth century—may be increasing in frequency. In the five-year period from 2008 to 2013, there was an average of almost two mass shootings per month (Moya-Smith 2013: n.p.).

Iowa's Gun Culture and Social Conditions

Iowa has experienced a steady increase in handgun permit to carry applications and issuance over the last two decades. Private ownership of a handgun is allowed in the state once a permit has been issued.² In fact, according to the GAO (2012: n.p.), Iowa is in the top five of all states by ratio of active permits issued to the adult population. Iowa is also in the minority of states recognizing permits from all other permit-issuing states. As of December 31, 2011, there were approximately 243,000 active gun permits in Iowa for an adult population (20 years of age

² Gun permits are issued to Iowa residents by the sheriff of the county in which the person resides. For non-residents, such as law enforcement officers from other jurisdictions the Commissioner of Public Safety issues the permit to carry.

or older) of 2,226,000 (GAO 2012: n.p.). This translates into a ratio of active permits to adult population of 10.9 (GAO 2012: n.p.). Only Georgia's and Utah's ratios, at 11.5 and 19.3, respectively, were higher for that year. Data from the Iowa Department of Public Safety reveals a steady increase in the number of weapon permits to carry issued in all counties across Iowa from 1996 through 2010. (Note the 2011 law changed the handgun permit to carry from an annual permit to a five-year permit making a direct comparison prior to 2011 inapplicable.)

Guns are well represented in Iowa retail. As of March 2015, there were 1,630 gun-shops (i.e. FFL or Federal Firearms Licensed) listings for the state of Iowa (FFL Gun Dealers, 2016: n.p.). One such large-scale gun parts distribution center is Brownells, headquartered in Montezuma, Iowa, which claims to be the "World's Largest Supplier of Gun Parts, Gunsmith Tools, and Firearm Accessories" (Brownells, 2015: n.p.). Brownells, established in the 1920s, expanded and opened a new 200,000 square foot distribution with an additional retail center in Grinnell, Iowa, in October, 2014. It may also be able to create up to 200 additional jobs in a short timeframe for the local community.

In Iowa, as elsewhere, guns are also sold informally at gun shows. In 2013, the National Directory of Gun Shows in America listed three gun shows in Des Moines, the state capital, and one in Cedar Rapids, the state's second largest city, in the fall of 2013. An additional nine gun shows were scheduled for fall 2013 and one in mid-January 2014, according to a more local website (Gun Show Trader 2013: n.p.), and the Gun Show Minute (2013: n.p.) listed fourteen over a six-month timeframe. Meanwhile, Sioux Falls, South Dakota, which is about ten miles from Iowa's northwest corner, had two gun shows scheduled for fall 2013. Tradeshow Productions Limited (2014: n.p.) listed four additional gun shows in Iowa for January 2014 and

eleven more between February and November 2014. Gun Show Monster (2013: n.p.) identified eighteen gun shows from October 11, 2013, through December 27, 2013. Gun Shows Today (2013: n.p.) listed twenty-three gun shows on its site, and Iowa Gun and Knife Shows (2013: n.p.) listed fifteen.

Tradeshow Productions Limited and other advocacy organizations offer another way to measure Iowa gun culture: by gun-related events. Besides listing gun shows, the website identifies several associated links, including links for the National Rifle Association, Central Iowa Shooting Sports, Gun Owners of America, the National Association of Federally Firearms, Gun Owners Legal Defense, and the United States Firearms Manufacturing Company Incorporated. These organizations' orientations vary, some touting strong pro-gun political stances with "hit-lists" of politicians deemed as possible deserters of the organizations' cause and another providing training for "the SAFE and CORRECT way to enjoy guns." Another gun organization, Iowa Gun Owners has branded itself as "Iowa's Only No Compromise Gun Lobby" and characterized itself as an "advocacy" organization. Its politically active focus is represented by icons across the top of the webpage titled "legislation" and "sign our petitions," with dropdowns focused on current, contentious gun issues.

Another such advocacy group is the Iowa Firearms Coalition (IFC), a well-organized grassroots organization. The IFC website keeps readers abreast of legislation that it favors or execrates. The IFC has proclaimed its alliance with the NRA when each organization backed legislation to prohibit publication of names and addresses of those possessing permits to acquire, purchase, and carry firearms. The IFC (2015: n.p.) took the stance that "antigun media outlets" had "abused their privileges under the Freedom of Information Act...by publishing the

names and addresses of registered gun owners.” The IFC (2015: n.p.) asked readers to contact legislators to allow a hearing and to pass the bill because the legislation represented “an important reform to Iowa’s gun laws.” As of September 2013, there was evidence on the IFC’s website of a strong presence and a continued, focused effort to protect and expand individual gun rights.

There are also many shooting ranges in Iowa. At minimum, there are twenty-four public shooting ranges, seventy-seven members-only ranges, and sixteen businesses operating shooting ranges (IAShooters.org 2014: n.p.). Figure 2.1 shows relative locations of each of these types of ranges.

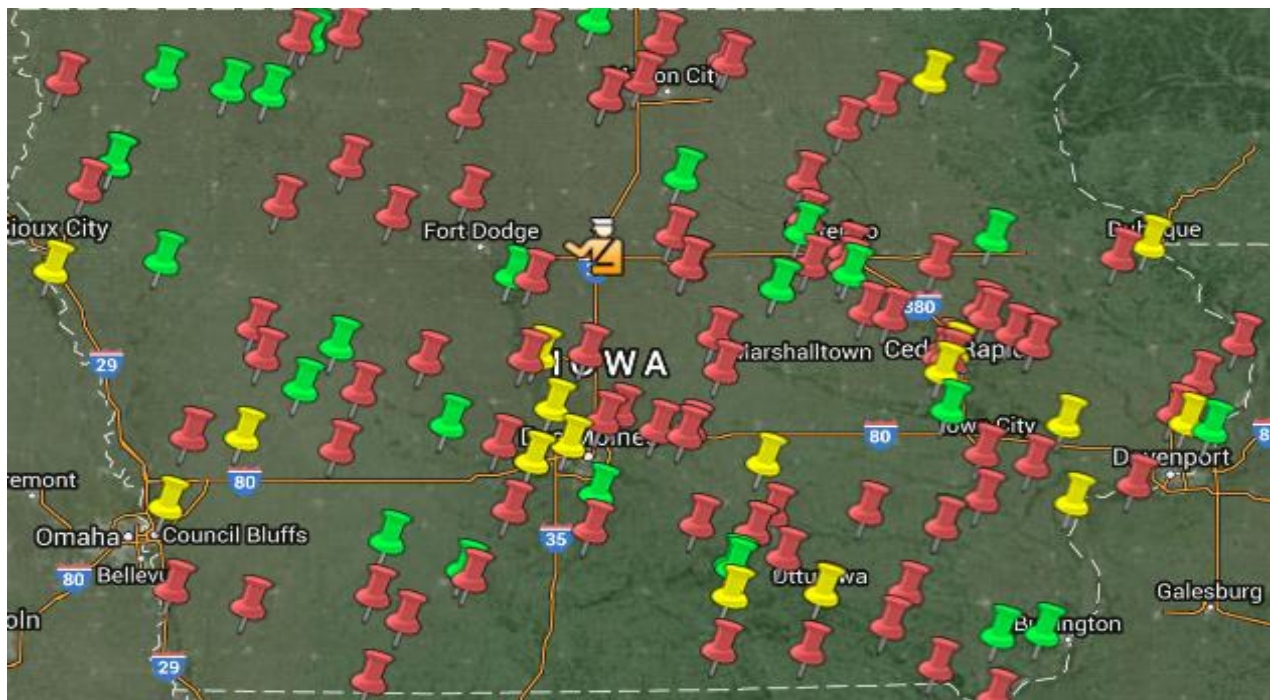


Figure 2.1 Public, Member-Only, and Business-Operating Ranges in Iowa in 2013

Ranges and clubs also represent community sites. The River City Rifle and Gun Club of Mason City, Iowa, offered news of local events such as the NRA Women On Target Instructional

Shooting Clinic and the April, June, and September, 2013 Varmint Benchrest Rifle Matches. The Hawkeye Rifle and Pistol Club offers information about such events as its Street Challenge Shoot, the Rimfire Shoot, the Steel Challenge Shoot, three summer and other league schedules, a muzzle loader event, a muzzle loader turkey shoot, and a total of approximately 102 events of some sort between January 7, 2013, and October 7, 2013.³ The Charles Olofson Shooting Range is a training center with a Green Beret Tactical Shoot and more than one skeet and clay shooting events. The Central Iowa Machine Gun Shoot took place in June, 2015, in Mount Auburn, Iowa. In fact, the Iowa Gun Clubs and Shooting Ranges website (2013: n.p.) listed a total of fifty-five gun clubs in Iowa.

The presence of gun and rifle clubs; the marketing of gun shows and shooting events by gun rights, training, and advocacy organizations and groups; the online, fairly sophisticated, electronic, web presence of these varied groups; the partnerships between these organizations and the inherent and evident networking between these groups; and the marketing of “associated links”—some of which can be viewed as strong proponents of gun rights with some using fairly strong language to describe politicians as targets on a “hit list” and others more politically restrained—all speak to a vibrant gun culture in Iowa.

The Iowa firearms death rate (i.e., deaths due to injury by firearms per 100,000 persons) is 7.5 in 2015; the U.S. rate is 10.3 (Iowa Life Expectancy 2016: n.p.). This rate ranks Iowa forty-third in the nation (Iowa Life Expectancy 2016: n.p.). This may be a reflection of a low crime rate in the geographic areas in which most handgun permits are issued, rural areas. Almost 70

³ Many of these 102 events involved the same group members meeting many times on a fixed interval schedule over the nine-month time period.

percent of Iowa's population lives in an urban setting; this setting has a lower handgun permit issuance rate than rural Iowa. Since about two-thirds of all homicides are committed with a firearms and Iowans live in a location with a low handgun permit issuance rate, it might be expected that the deaths due to injury by firearms rate would be low, even in the face of a higher crime rate. Iowa's firearms death rate is also consistent with other states in the Midwest.

Iowa gun-related policy also tracks with national trends. First, gun permitting has become more permissive. On January 1, 2011, Iowa—following similar legislation enacted in more than seventy percent of all states—became a shall-issue instead of a may-issue state. This change restricts the authority of the issuing official, typically the county sheriff, who is now required to issue a handgun permit to an applicant, with some exceptions dictated by federal and/or state law (discussed in greater detail in the next section). Prior to this law change, sheriffs had more authority and could deny an application if in the judgment of the sheriff such action was warranted by an applicant's prior activities or conditions known to the sheriff, such as an arrest for substance use/abuse with or without an eventual criminal charge, indictment, or conviction.

Iowa Gun Laws

With little doubt, the most significant gun law enacted in Iowa in recent times is the 2011 permit to carry law. The law was a product of a nation-wide gun law movement that began in earnest when the state of Florida passed its shall-issue and stand your ground statutes (Diaz, 2013: 109). These laws have caught on across the nation. Iowa followed in Florida and other states' footsteps with its handgun permit to carry law in 2011.

Iowa Statute 724.15, which went into effect on January 1, 2011, specifies the individualized requirement for the Annual Permit to Acquire Pistols or Revolvers. It states:

“Any person who acquires ownership of any pistol or revolver shall first obtain an annual permit. An annual permit shall not be issued to any person unless: (a) the person is twenty-one years of age or older; (b) the person has never been convicted of a felony; (c) the person is not addicted to the use of alcohol or a controlled substance; (d) the person has no history of repeated acts of violence; (e) the person has never been convicted of a crime defined in chapter 708, except ‘assault’ as defined in section 708.1 and ‘harassment’ as defined in section 708.7; and (f) the person has never been adjudged mentally incompetent.” (Code of Iowa 2016: n.p.)

Iowa Statute 724.16 stipulates the penalties associated with the Annual Permit to Acquire Required—Transfer Prohibited statute:

“Except as otherwise provided in section 724.15, subsection 2, a person who acquires ownership of a pistol or revolver without a valid annual permit to acquire pistols or revolvers or a person who transfers ownership of a pistol or revolver to a person who does not have in the person's possession a valid annual permit to acquire pistols or revolvers is guilty of an aggravated misdemeanor. A person who transfers ownership of a pistol or revolver to a person that the transferor knows is prohibited by section 724.15 from acquiring ownership of a pistol or revolver commits a class ‘D’ felony.” (Code of Iowa 2016: n.p.)

There are several Iowa statutes related to the handgun permit to carry. These are distinct from the permit to acquire statutes. Iowa Statute 724.4 is titled Carrying Weapons; 724.5 is titled Duty to Carry Permit to Carry Weapons (i.e. a person must have the permit in his/her possession); 724.6 is titled Professional Permit to Carry Weapons (e.g. law enforcement and correctional officers); 724.7 is titled Nonprofessional Permit to Carry Weapons; 724.8 is titled Persons Ineligible for Permit to Carry Weapons; 724.10 is titled Application for Permit to Carry Weapons – Background Check Required; 724.11 is titled Issuance of Permit to Carry Weapons; 724.11A is titled Recognition (i.e. Iowa’s recognition of other states’ permits or licenses to carry); 724.12 is titled Permit to Carry Weapons not Transferable (i.e. a permit to

carry is not transferable from one person to another); and 724.13 is titled Suspension or Revocation of Permit to Carry Weapons – Criminal History Background Check.

Statute 724.7 is the most pertinent statute as private use, prohibitors (i.e., those characteristics that disqualify an individual from receiving a permit to carry), required training, and proper application set parameters intrinsic to this study. This statute, minus a section regarding military service members, is provided below.

“Any person who is not disqualified under section 724.8, who satisfies the training requirements of section 724.9, and who files an application in accordance with section 724.10 shall be issued a nonprofessional permit to carry weapons. Such permits shall be on a form prescribed and published by the commissioner of public safety, which shall be readily distinguishable from the professional permit, and shall identify the holder of the permit. Such permits shall not be issued for a particular weapon and shall not contain information about a particular weapon including the make, model, or serial number of the weapon or any ammunition used in that weapon. All permits so issued shall be for a period of five years and shall be valid throughout the state except where the possession or carrying of a firearm is prohibited by state or federal law.” (Code of Iowa 2016: n.p.)

Iowa gun law as it interacts with federal law is complex. The Iowa Department of Public Safety’s Administrative Services Division, Program Services Bureau, Weapons Permit Section provides a detailed outline of a Firearms Transfer Synopsis. This delineates types of transfers and compares federal and state requirements for long gun and handgun transfer between various parties, private and/or familial; those parties residing in Iowa; those residing outside the state; and transfers from a federally licensed gun dealer inside and outside the state. Some activities (e.g. transfer of long gun between private parties residing in different states regardless of familial relationship) are prohibited at the federal level and state requirements are labeled “not-applicable.” Another type of transfer, such as a handgun between private parties residing in Iowa, is allowed by the federal government without a background check, but

a permit is required under state law. In this instance, state requirements also read that the transfer is allowed, but a permit to acquire or a permit to carry is required.

Of ten circumstances that prohibit the ownership or possession of a firearm under federal law, Iowa law copies only three (Loder 2013: n.p.). For instance, in a 2013 correspondence, a representative of the Iowa Department of Public Safety explained that

“...a person who has been involuntarily committed for mental illness or substance abuse to an appropriate facility is federally prohibited to possess a firearm...but not prohibited under state law (i.e. it is the next step—a committal after evaluation that triggers the State of Iowa firearm prohibition). If such a person possesses a firearm in Iowa, there is no state charge that can be pursued for possession...it is not a state crime in Iowa. If charges are pursued, that must occur by way of federal criminal charges.” (Loder 2013: n.p.)

There are several federal requirements that are not found in Iowa law, and Iowa law dictates more than a few requirements that are more rigorous than those found in some federal gun law. These circumstances complicate the legal picture further. First, in accordance with the Supremacy Clause, Article VI, Clause Two, of the U.S. Constitution, which addresses conflicts between state and federal law, federal law supersedes state law. Second, the U.S. Constitution’s Privileges and Immunities Clause, Article IV, Section Two, Clause One, also known as the Comity Clause, also affects gun law. Its intent is to ensure any state government does not treat a citizen of another state in a discriminatory manner, including interstate travel with firearms.

Iowa’s constitution does not include a constitutional right to bear arms, but firearms are not registered in the state of Iowa. Iowa does not have a stand your ground law. Stand your ground law removes a person’s duty to retreat before using force in self-defense. Twenty-three states have enacted this legislation, with a few additional states having judicial decisions

embracing this meaning independent such a law. At the same time, Iowa law does not require retreat from aggressors within one's home or place of business. In these instances, civil immunity for persons who injure aggressors in self-defense is provided by Iowa law.

As a shall issue state, each county sheriff in Iowa must issue a permit to carry to qualified applicants. To acquire a handgun, a person must hold a valid Permit to Acquire a Pistol or Revolver or a valid Permit to Carry Weapons, though there are certain exceptions to this requirement. To carry a concealed or open-carried handgun into an incorporated area anywhere in Iowa, a Permit to Carry Weapons is required. A background check is required for both types of these weapons permits. To obtain a Permit to Carry Weapons, an applicant can complete a handgun safety course with an instructor certified either by the Iowa Department of Public Safety; by another state's Department of Public Safety; by a similar certifying entity, such as the Iowa Law Enforcement Academy or the National Rifle Association; or by successful completion of military small-arms training, or by simply completing an on-line course without ever firing a handgun.

Circumstances that might prevent an applicant from receiving an approval to carry include addiction to alcohol and the commission of a serious or aggravated misdemeanor under the Code of Iowa, Chapter 708 (e.g., assault, stalking, or harassment). This makes a person ineligible for a permit to carry weapons for three years, except in occasions that do not require a permit, such as open carry of a handgun outside city limits or carrying on one's own property.⁴ Second, probable cause to believe that an applicant is likely to use a weapon

⁴ An aggravated misdemeanor involving a firearm or explosive results in a lifetime possession and permit prohibition.

unlawfully, including endangering self or others, may also lead an application to be denied. Third, a prior felony conviction at the state or federal level, without civil rights restoration, executive pardon, or expungement of conviction, proscribes approval. Fourth, there is a minimum age requirement of twenty-one years of age for carrying a handgun. However, a person who has been adjudicated delinquent in juvenile court for behavior that if committed by an adult would have constituted a felony is prohibited from possessing firearms or from being issued a Permit to Carry Weapons. Finally, certain mental health judgments or adjudications, specific federal law prohibitions, protective orders, and “misdemeanor crimes of domestic violence” may result in a prohibition against possessing firearms and ineligibility for one or both types of weapon permits (Code of Iowa 2016: n.p.).

Iowa has a general prohibition against possession of offensive weapons. This prohibition does not precisely match the definitions of the National Firearms Act (NFA) of 1934, which imposes a statutory excise tax on the manufacture and transfer of certain firearms and mandating registration of those firearms (Loder 2013: n.p.). The National Firearms Act regulates a number of categories of weapons, including machine guns, short-barreled rifles, short-barreled shotguns, suppressors, destructive devices, and many other weapons within a broad, catch-all category, including disguised firearms, cane guns, pen guns, smooth bore pistols, weapons that can be fired from within a briefcase, and others (see Federal Gun Control Act of 1968, a revision of the 1934 National Firearms Act).

There is no waiting period for gun purchases in Iowa. Iowa law requires that an initial or renewal application to carry be approved or denied within thirty days (Code of Iowa 2016: n.p.). In some counties, the permit to carry is issued in less than an hour. In others, it commonly takes

up to thirty days for the permit to be issued. This time lag becomes a de facto waiting period for some applicants. County personnel conduct criminal and other background checks.

Iowa gun law is partially a product of its group socio-demographic characteristics and patterns. Differences in socio-demographic characteristics and patterns between different cultural groupings may influence gun permit rates. The next section reviews the cultural variables considered in this study.

Iowa Socio-Demographic Patterns

County types were constructed using the USDA Economic Research Services' Rural-Urban Continuum Code and Exploratory Factor Analysis uncovering the underlying structure of and relationship of nine, measurable variables. The measurable variables were population, age, median household income, race, military veteran status, education, political party voter registration, religion, and crime. This section outlines data and statistics related to these nine socio-demographic variables. It is important to become aware of socio-demographic differences between county types to understand why four county types were created and used in this study. Trends and consequences for rural and urban counties are noted. This offers a descriptive review of rural and urban Iowa, including salient aspects of their social, economic, political, and cultural landscapes.

Population

I use Iowa as the locus for my investigation because on the surface it seems to split neatly into urban and rural populations. Iowa's 2014 population is estimated to be about 3.1 million, constituting a sparse population density of about 55 persons per square mile (Iowa

Data Center 2015: n.p.).⁵ As of 2000, rural area population density was about 21 persons per square mile (Demographia 2015: n.p.). The state experienced a 5.5 percent decrease in agricultural to urban land use from 1950 to 2000 (U.S. Department of Agriculture, 2000: n.p.). The Iowa Data Center (2010: n.p.) classifies twenty Iowa counties without an urban population and nineteen without any urban land area. Meanwhile, 64 percent of Iowans live in urban areas and thirty-six percent reside in rural areas (Iowa Data Center 2010: n.p.). There are nine metropolitan or urban centers comprised of twenty-one counties (Iowa Data Center 2010: n.p.).

It is advanced that as Iowa's population continues to migrate to more highly populated cities and away from rural areas, some with a distinct frontier atmosphere (i.e., USDA frontier status is denoted as FAR – Frontier and Remote), liberal handgun legislation may represent the handgun views and practices of fewer Iowans. Then again, urban in-migration by rural area inhabitants may result in the importation of more pro-handgun views and behavior, including open and/or concealed carry, to urban and technocratic/professional settings. This may increase the urban handgun carrying rate in the immediate and long-term, constituting social institutional and cultural shift.

As people migrate from rural to urban areas—as they have been doing in Iowa for many decades—gun permit to carry rates may decline or may not decline. It is possible, as Utter and True (2000: 77) argue, that urban in-migration may diminish gun activities such as gun sports, hunting, and even gun-related political activity. However, gun-related public policy is generated from various pressure points and this may mediate the impact of urban in-migration. This

⁵ For comparison, there are about 88 persons per square mile on average in the United States.

section examines how Iowa population is changing and how these changes may intersect with handgun use.

According to the U.S. Department of Agriculture (2014: 4), between 2010 and 2013, most rural Iowa counties lost population. Of those rural counties that gained in population, most gained less than 1 percent, and four others gained only 1.5, 1.7, 2.0, and 2.5 percent population, respectively (Iowa Community Indicators Program 2016: n.p.). Meanwhile, eight of the nine metropolitan statistical areas had counties that gained population (Iowa Community Indicators Program 2016: n.p.). The one metropolitan county not gaining population, Pottawattamie County, lost just 0.5 percent (Iowa Community Indicators Program 2016: n.p.). Most Iowans migrating within the state move to cities with populations of 10,000 to 50,000 (Iowa Public Radio 2015: n.p.). Iowa's technocratic/professional counties have population bases in Iowa City and Ames. Iowa City grew in population 7.7 percent and Ames grew by 5.1 percent between 2010 and 2014 (U.S. Census Bureau 2010: n.p.). Median household income is higher in technocratic/professional Johnson and Story counties, but income disparity is high as college students earn little and professional jobs and some other highly specialized jobs "are strongly linked with high and extreme inequality...with a larger employment base and faster job growth" (Peters 2013: 1503). But, these college students attend top-tier universities and many are supported by middle to upper-middle class parents. Their unemployed and low wage statuses are offset by an immersion in their academic endeavors, which can keep them socially and cognitively active. This adds to social stability. Further, the age of post-industrialism has affected Iowa's technocratic/professional counties, increasing wages for professional jobs' need for higher skills and formal education levels. This system strengthens technocratic/professional

counties' interrelated parts and their synchronization as younger persons work to complete professional degrees and middle-aged professionals set an example to emulate. This social and economic stability increases social cohesion & a highly complex and nuanced division of labor requiring cooperation between occupations.

Iowa's technocratic/professional counties are urban areas with small populations. Story County's population is just over 93,000 and Johnson County's is just under 143,000. For Iowa, though, these are large population counties. These counties have a more vocationally skilled and professional workforce than other counties. This advanced environment includes the state's two pre-eminent, top-tier, national, research universities. These universities are elected members of the 62-member Association of American Universities dedicated to very high research activity. Iowa State University and the University of Iowa employ many thousands of individuals serving over 60,000 students. These employees earn well above average wages and have a very competitive benefit package that includes a very attractive retirement program. These world-class universities are training academies for Iowans on their journey to enter fairly specialized fields and the construction of a productive social life. Iowa's other seven urban areas have either smaller, private colleges, or in one case, a smaller public university, or have a higher educational institution within Iowa's community college system. These urban areas, in most cases, are also small with their major cities having populations near or under 100,000. Exceptions are Des Moines at just over 200,000 and Cedar Rapids at about 128,000. These are distinct from technocratic/professional environments with, in general, more reported violent and property crime, an older population, lower educational education achievement, a higher percentage of African-Americans, lower income, a lower permit to acquire handgun rate, a

much higher military veteran rate, and a different religious denomination affiliation composition. These areas, especially in central and eastern Iowa within an area bordered by Des Moines, Ames, Cedar Falls/Waterloo, Cedar Rapids, Davenport, Dubuque, and Iowa City, are more economically vibrant than rural areas and attract rural migrants from within Iowa. Differences between urban and technocratic/professional urban settings vis-à-vis handguns will be discussed further in chapter four.

The population changes experienced in each type of county are changing the state's character. Economic indicators and social facts reveal greater income, employment, and educational opportunities in urban settings than in rural settings (U.S. Department of Agriculture 2014: n.p.). In Iowa, as of 2010, only 1.7 percent of Iowa's total land mass was urban (U.S. Census Bureau 2010: n.p.). In contrast, 37.7 percent of Connecticut's and 38.3 percent of Massachusetts' land was considered urban (U.S. Census Bureau 2010: n.p.). Iowa's 54.5 persons per square mile is far less than the U.S. average of 87.4 persons per square mile. In 2010, Iowa's rural areas had a population density of twenty persons per square mile. Connecticut's was 142.3, and Massachusetts' was over 109. Despite the fact most of Iowa's land is categorized as rural, most of the state's population is found in urban areas. More than 64 percent of Iowa's population lived in urban locations in 2010, up from 61.1 percent in 2000 and 60.6 percent in 1990 (U.S. Census Bureau 2010: n.p.).

From 2010 to 2014, Iowa's overall population grew just under two percent. Only twenty-eight of Iowa's ninety-nine counties had population growth from 2014 to 2015, with most of the growth in urban areas (Ames Tribune 2016: n.p.). Of the eleven most rural Iowa counties, all but one (Worth County) lost population from either 2010 to 2014 or 2013 to 2014

(Iowa Community Indicators Program 2015: n.p.). While all nine urban counties gained population, no micropolitan cities grew (i.e., non-metropolitan counties with populations between 20,000 to 49,999) (Eathington 2015: 3; Iowa Data Center 2016: n.p.). Population change between 2014 and 2015 indicates that all Iowa counties located in the two, most-southern, tiers lost population (Iowa Data Center 2016: n.p.). Cities in Iowa with populations of 50,000 or more made up forty-six percentage shares of state-wide population change between 2010 and 2014 (Eathington 2015: 2). For the same timeframe, cities with populations between 10,000 and 49,999 made up forty-nine percentage shares (Eathington 2015:2). Cities with populations between 500 and 2,499; under 500; and unincorporated areas had a negative three percentage shares of state-wide population change in the same timeframe (Eathington 2015: 2). Smaller cities and unincorporated areas are losing population to bigger cities (Eathington 2015: 2).

Today, population data show there is a dearth of population growth in many low-population counties, including those in southwest and north-central Iowa (Peters 2014: 4). These areas are known as frontier areas (USDA, Economic Research Service 2010; Peters 2014: 4). Frontier areas, or counties, are characterized by sparse population and high geographic remoteness from more populated areas. The USDA uses the FAR acronym for this specification as a designation for frontier and remote. There are four FAR classifications used to facilitate research. A county that is 60 minutes or more from an urban area with 50,000 or more population is a level one FAR county. A level two is sixty minutes from urban areas with 50,000 or more people and remote from urban areas of 25,000-49,999 people. A level three has the same remote traits as level two, but has the additional trait of being 30 minutes or more from

urban areas of 10,000 -24,999 people. A level four has all the traits of levels one, two, and three, with the additional trait of being 15 minutes or more from an urban area of 2,500-9,999 people. Almost all of the southern border counties in Iowa touching the northern Missouri border and much of northwest Iowa, with the exception of the most western counties adjoining Nebraska and South Dakota, fit in the FAR level one. The most remote are located along Iowa's southern border, with perhaps a total of just four or five in western, northwestern, and far northeast Iowa. Peters (2014: 5) notes that "over the last 50 years rural areas have become more sparsely populated resulting in more isolated frontier areas in Iowa." These areas, Peters (2014: 4) adds, most commonly have fewer than 10 people per square mile. The U.S. Census Bureau (1910–2010 Decennial Censuses: n.p.) indicates that approximately thirty Iowa counties fit this frontier category. Social capital and the economic outlook for many of Iowa's rural and frontier counties are changing. Much of rural and frontier Iowa has and continues to experience declining community member involvement, services, and amenities, perhaps since World War II, threatening economic and social equality and viability (Besser and Sapp 2015: n.p.; Lasley et al. 1995: 2). These researchers found that residents of small towns were more dissatisfied with government and non-government services compared with more populated area residents. Rural community members' attitudes toward housing, medical care, and child care are lower than attitudes about government services. The research studied towns with 500 to 10,000 people, half of which lost population in the last ten years.

In general, these small-town community members rated their social environment and the services offered lower than larger county inhabitants. Their sense of community, determined by a greater tolerance of differences between persons and a desire to partner with

others to produce solutions for communal challenges, has diminished (Besser and Sapp 2015: n.p.). Church attendance is important to small town community members, yet it appears population decline has caused churches to consolidate, even between towns or cities. The church serves as a social conduit for small towns; some alternatives are found, such as a quick shop/gas station, but these may not include all family members as churches do (Besser and Sapp 2015: n.p.). School districts are forced to consolidate taking children out of town to neighboring towns several miles away from home. Accordingly, rural Iowa is in the midst of change, with social institutions meant to pass cultural values and symbology and institutionalized class relations to the next generation weakened by a declining economic condition with grave manufacturing-based job losses in a global economy; an aging population; a “class structured”, “brain-drain”, out-migration pattern (Carr and Kefalas 2009: 8 and 52); and a deconstructing social milieu.

Income

Using the U.S. Census Bureau’s 2009 to 2013 estimate, Iowa’s median household income was \$51,843 compared to the U.S. median of \$53,046 (Iowa Community Indicators Program 2016: n.p.). The 2010 to 2014 estimate for Iowa was \$52,716 compared to the U.S. median of \$53,482 (U.S. Census Bureau 2016: n.p.). The most rural counties had a median household income of \$40,528; the moderately rural a median of \$45,929; urban had \$49,821; and technocratic/professional had \$50,103. Some research findings have shown that as income rises, firearm ownership rates rise (Lott 2000: 38).

Race

The 2014 U.S. Census Bureau and the Iowa Community Indicators Program present socio-demographic data for Iowa and the United States. Iowa is 91.3 percent white (Iowa Community Indicators Program 2015: n.p.). African Americans and Hispanics make up just 3.1 and 5.5 percent of the total Iowa population (compared to 13.2 and 17.1 percent U.S. population, respectively) (Iowa Community Indicators Program: 2015: n.p.). Iowa's urban counties have a greater number of African Americans than rural counties, with Blackhawk, Scott, and Polk counties registering 8.8, 7.0, and 6.0 percent compared to many rural counties hovering far below one percent (U.S. Census Bureau 2014: n.p.). The Hispanic population is very low in rural counties with exceptions in a few counties with small or micropolitan cities. These include the counties of Marshall, Louisa, Buena Vista, Muscatine, and Franklin. Only 4.9 percent of Iowa's population is foreign-born, compared to 12.9 percent in the United States (Iowa Community Indicators Program 2015: n.p.; U.S. Census Bureau 2014: n.p.).

Education

Regarding education, 27.7 percent of Iowa's population 25 years of age or older have bachelor's degrees or higher, whereas 28.8 percent of the U.S. has attained this level of education (Iowa Community Indicators Program 2015: n.p.; U.S. Census Bureau 2014: n.p.). In general, urban counties have a greater percentage of persons with bachelor's degrees or higher than rural counties. In Iowa, just two of nine urban centers fall below the 25.9 percent state-wide standard: Pottawattamie and Woodbury counties (Iowa Department of Education 2014: n.p.). Both of these urban counties are on the far western border, separated by South Dakota and Nebraska by the Missouri River. These counties are far from most of Iowa's population,

which is located in central and eastern Iowa. Technocratic/professional counties have an inordinately high percentage of persons with bachelor's degrees or higher compared to other urban and the rural counties. Story county has 47.2 percent of its population holding a bachelor degree or higher (Iowa Department of Education 2014: n.p.). Johnson county has 50.8 percent of its population holding a bachelor degree or higher (Iowa Department of Education 2014: n.p.). Urban Blackhawk comes in at 24.6 percent; Dubuque at 25.3 percent; Linn at 29.6 percent; Polk at 32.8 percent; Pottawattamie at 17.3 percent; Scott at 29.7 percent; and Woodbury at 20.8 percent (Iowa Department of Education 2014: n.p.). It appears there is enough less specialized employment in these predominantly urban, non-technocratic/professional counties that a four year-or-higher, higher educational degree is unnecessary. Most Iowans (91.1 percent) hold a high school diploma compared to 86.0 percent of people in the United States (U.S. Census Bureau 2014: n.p.).

Military Veteran Status

Iowa's military veterans comprise 8.38 percent of its population (Iowa Data Center 2015: n.p.). This is a higher percentage than Americans as a whole (6.7 percent). Even though veterans represent a healthy percentage of most Iowa counties, urban or rural, a greater percentage of rural county population is comprised of military veterans than urban counties. The technocratic/professional counties have significantly lower military veteran populations. Instead, those in military service are drawn disproportionately from rural areas. In 2005, rural Americans made up just 19 percent of the U.S. population, yet they represented 44 percent of the recruits in the U.S. military (Carr and Kefalas 2009: 91; Behrman 1997: n.p.). Rural Iowa's greater unemployment rate and "lack of options" for younger persons than urban Iowa, in the

context of Backcountry culture, begets military service enlistment for many young persons (Carr and Kefalas 2009: 88, 105). This facilitates a quicker transition to adulthood and parenthood in some cases. Joining the military can also be more attractive than attending community college, working in a low-skill job, and waiting to become victimized by “global market shifts and shrinking wages and benefits” (Carr and Kefalas 2009: 96). Adair County, in the rural southwestern corner of the state, with a population of just 7,682, had one of the highest percentages of veterans with over 12 percent (U.S. Census Bureau 2014: n.p.) This is a potential marker for backcountry status.

Age

Of the 3.1 million persons living in Iowa, approximately two out of three are older than 25 years of age; over twenty-five percent are over forty-four years of age; and about one of six are 65 or older (U.S. Census Bureau 2010: n.p.). The rural county average age is higher than the urban county average. Those 65 years of age or older in the nine urban counties make up 12.4 percent of the population, and within these urban counties, the two technocratic/professional counties average 9.3 percent of the population (U.S. Census Bureau 2010: n.p.). From 2000 to 2010, the percentage of persons 65 years of age or older increased in all nine urban counties (U.S. Census Bureau 2010: n.p.). Those 65 years of age or older in the most rural counties make up 20.8 percent of the population (U.S. Census Bureau 2010: n.p.). From 2000 to 2010, about three-quarters of the most rural counties had a greater percentage of persons 65 years of age or older. Some research findings have shown that as age increases, firearm ownership rates increase (Jones 2013: n.p.).

Religion

Protestantism and Catholicism are found throughout Iowa, but in general, there are far more Protestants than Catholics in Iowa in almost all counties (U.S. Religion Census 1952-2010: n.p.). Catholics tend to inhabit urban centers in Iowa, with some exceptions (e.g. Chickasaw and Dickinson counties). Only in Carroll, Delaware, Dubuque, and Jackson counties do Catholics outdistance Protestants by percentage (U.S. Religion Census 1952-2010: n.p.). In Carroll county, 57 percent of the population report to be Catholic, whereas under 30 percent report to be Protestant (U.S. Religion Census 1952-2010: n.p.). For Delaware county, Iowa, over 42 percent claim Catholicism adherence or membership and under 27 percent claim Protestant adherence or membership (U.S. Religion Census 1952-2010: n.p.). For Dubuque county, 53 percent report Catholicism and just 14 percent report to be Protestant, and for Jackson county, almost 35 percent present self as Catholic and 25 percent as Protestant (U.S. Religion Census 1952-2010: n.p.). These four counties also have low handgun permit issuance rates.

Crime

This study shows that violent crime rates are generally higher in Iowa's urban counties than rural counties, and as urban areas, technocratic/professional settings have moderate violent crime rates. Violent crime includes murder, rape and sexual assault, robbery, and assault. In 2010, the violent crime rate for Iowa was 268.5; or 268.5 violent crimes per 100,000 persons (U.S. Department of Justice 2016: n.p.). In 2010, the property crime rate was 2,253.6, with larceny and theft comprising three-fourths of the total (U.S. Department of Justice 2016: n.p.). The most populous Iowa county, Polk County, also has the most populous city, Des Moines. The Des Moines Police Department reported little change in violent crime in 2010,

2011, and 2012. 1,084, 1,069, and 1094 violent crimes were reported for these years (U.S. Department of Justice 2010: n.p.). In Adams and Calhoun Counties, two of the least populous Iowa counties, there were twenty-one and three, respectively, violent crimes reported.

Political Party Voter Registration

There is about twenty-five percent more persons registered with the Republican party than the Democratic party in the most rural Iowa counties. Democrats outnumber Republicans by about twenty-five percent in Iowa's urban counties. A 2014 Gallup poll classified Iowa as a politically competitive state with neither party having advantage over the other by more than five points (Gallup 2014: n.p.).

Lott (2000: 36) maintains those who vote own guns at the same percentage as households with guns; that typical gun owners are conservative Republicans; that thirty-three percent of Democrats own a firearm; and that non-voters may own guns at about the same percentage or perhaps a bit more than those who vote. Silver (2012: n.p.) and Saad (2011: n.p.) note that in the last twenty years firearm ownership exemplifies political partisan polarization best, and reinforces Lott's position that a much greater percentage of Republicans than Democrats own guns. Sharp (2012: n.p.) notes that gun ownership and age correlate differently by political party as Republican gun ownership remains consistent by age group, but a much lower percentage of younger Democrats own compared to older Democrats. Landsford (2012: 706), writing in *Guns in American Society*, notes that the dominant Republican ideological perspective includes a strong resistance to gun control as an indicator of the Republican focus on individualism and the GOP's aversion to a more pronounced role for government. Landsford's commentary is consistent with this study's theoretical groundwork and analyses

(see table 2.1 below) that suggest that some aspects of rural Iowa, including a strong sense of individualism, a desire for limited government, and Republican political party affiliation, correspond.

Table 2.1. 2010 Political Party Voter Registration by 2010 Handgun Permit to Carry Issuance Rate for Iowa

	<i>Rep Rate</i>	<i>Dem Rate</i>	<i>NP Rate</i>	<i>Total Registered Voters</i>	<i>Iowa 2010 Gun Rate</i>
Republican Rate	1				
Democrat Rate	-0.81085	1			
No Political Party Rate	-0.26889	0.157429	1		
Total Registered Voters	0.287261	0.090715	0.614433	1	
Iowa 2010 Gun Rate	0.317209	-0.19774	0.046298	0.263385	1
Minimum Correlation - 99 counties	$\alpha = .10$ 0.153	$\alpha = .05$ 0.196	$\alpha = .01$ 0.256		
Extremely High Correlation	Highly Correlated	Moderately Correlated	Low Correlation	No significant correlation	

Guns in Urban and Rural (and the Backcountry Cameronians) Iowa Culture

The urban individual learns to express and fulfill self in concert with an entire people, the community, with a specific moral and intellectual compass independent of the gun. The modern urban setting attempts to accomplish this without losing the individualistic nature of humankind. This study's handgun permit to acquire issuance rate findings support this contention. The urban environment allows specialization, division, and differentiation in a money economy. At the same time, individuals depend upon one and must to survive while maintaining their individuality. Some individuals require outside help in the form of government programs as a form of dependence. Of course, rural economics dictate this condition as well, but there are fewer persons subjected to the unpredictable global economy

in that environment. But the rural backcountry culture can connect a more frontier-individualistic and militaristic social network within an agrarian culture and economy (Krier, Stockner, and Lasley 2012: 57; Evans 1969: 74, 77). Some of this culture's societal standards correlate with a Scotch-Irish heritage.

The Scotch-Irish backcountry people were mostly farmers and farm laborers working as tenants and subtenants in Great Britain's borderland (Fischer 1989: 613; and Evans 1969: 77). More specifically, the English borderland, Scotch-Irish, backcountry people were about seventy-eight percent laborers, farmers, or common-skilled craftsmen (Bailyn 1986: 162, 163). They exhibited folkways that were traditional, rural, agriculturally-based, and anticomunitarian. Additionally, they worked hard at separating themselves from the Irish Catholics, who were seen as new immigrants, unworthy of nativist, colonial status since they were there to simply "cash in on the material prosperity created by the efforts of the earlier comers" (Jones 1969: 48).

In the early and mid-19th century, the Scotch-Irish began migrating across the backcountry cultural regions of the Ohio Valley into the Old West and the new frontier states immediately east and west of the Mississippi River (Gerlach 1997: 146; Evans 1969: 70). Prior to that movement, around 1725 and for many decades thereafter, the Scotch-Irish made their way from the Atlantic coast to the Shenandoah Valley and next to the Piedmont region of the Carolinas and into western Virginia (Turner 1920: n.p.). Other eighteenth century migration routes were also commonly used by the Scotch-Irish taking them south and west from east-central Pennsylvania, through what is now West Virginia, and Maryland, Kentucky, and Tennessee. They traversed the Appalachian System before crossing both the Ohio River and

the Cumberland Gap and headed southwest, west and northwest toward the frontier states of Louisiana, Arkansas, Missouri, and Iowa (Evans 1969: 70).

Of Iowa's 3.1 million residents, over half are descended from western Europeans. Iowa's descendants are 39 percent German and about 24 percent Irish, Scotch, Scotch-Irish, English, and Welsh. Using Iowa's congressional districts for guidance, southwestern Iowa has a greater percentage of persons with an Irish, Scotch, Scotch-Irish and British Isle heritage and a significantly lower percentage of persons of German descent. The German line makes up just 27 percent of the population in southwest Iowa compared to 32, 39, and 42 percent in northwest, northeast, and southeast Iowa, respectively (U.S. Census Bureau, American Community Survey 2013: n.p.). It was across the frontier that the Scotch-Irish were the most dominant group in the establishment of "a system of land-use dominated by a corn-and livestock economy and the unincorporated hamlet" (Evans 1969: 74).

Described as a "bold and hard race" by Theodore Roosevelt, the people of these rural and remote areas tend to have strong ties to gun possession, militarism, fewer social commitments, and individual honor at the expense of communitarianism (Evans 1969: 69; Fischer 1989: 616, 650, 663, 680, 740; Krier, Stockner, and Lasley 2012: 58, 59). Evans (1969: 72) described the remote-area, Scotch-Irish culture and its people as "successful pioneers"; "actively opposed to restrictions" found in "the ordered life of law-abiding villages and urban centers"; and as having "claims of family and kin" that were "stronger than those of community". Fisher's (1989: 615) research indicated that backcountry folkways historically generated a "fierce and stubborn pride that warned others to treat them with respect" in spite of poverty and any attempt to place these persons in a lower socioeconomic status.

Trust of others and a diminishing sense of community solidarity, “neighboring”, and “taking care of” another, can be limited to those with whom one knows and lives and a robust sense of isolation in the nation’s Midwestern states; partially a product of difficult financial times in rural Iowa (Lobao 1995: 184; Bier 1995: 180; Lay 2012: 68). For the Scotch-Irish, living “without the benefits of organized community life” was elementary (Evans 1969: 72).

Interestingly enough, this isolationism provides safety for small town Iowa, creates a “haven from Iowa’s cities”, racial and ethnic homogeneity, a recognition that there are some that “won’t fit in”, an environment without a “particular animosity toward immigrants”, and “sustained intolerance” for change and diversity (Lay 2012: 46, 47).

Lay (2012: 17, 45) also noted that “shifting demographics” can alter a longtime power structure and produce a “general sense of anxiety, pose a significant danger to social cohesion and national identity”. Lay (2012: 45) also instructed that power theory reveals white Americans are more hostile to racial integration, vote at higher rates, engage in more racial violence, and are more ideologically conservative in their response to the threat imposed by African-Americans to their social, economic, and political power”. Iowa’s gradually, socially and spatially isolated rural communities, remain “increasingly vulnerable to adverse effects from structural economic change” (Tickamyer and Duncan 1990: 67). These features of rural social life may partially explain the close social bonding and “cultural inertia” (i.e., “the desire to avoid cultural change” and preservation of “the rural way of life” and “adherence to conventional beliefs”) that occurs in rural America (Lay 2012: 46; Gardner and Shoemaker 1989: 488). These factors create a paradox for rural Iowans as social bonding and independence work conjunctively to support and divide, providing protection and uncertainty.

For the backcountry culture, along with fierce pride, self-praise, and self-righteousness, came little trust in legal institutions, a violent streak, a warrior mentality, a strong sense of liberty with a need for a limited and geographically remote government, self-sovereignty, the right of armed resistance to authority as a reflection of egalitarian democracy, and intolerance for contrary opinions (Fischer 1989: 629, 650; Evans 1969: 72). For rural Iowa's social structure, militarism can be observed via a maintenance of a strong individualized militaristic mind-set and an aggressive defense of self through physical weapon capability. This is replicated and institutionalized within Scot-Irish cultural history and social structure, and has traditionally been part of southern Iowa's rural traditions, customs, and folkways as the Scot-Irish brought with them a self-focused, personal gain economy and materialist orientation; a southern concept of liberty based in independence and autonomy; and has been described by Wilson (1997: 134) as "a highly speculative, grasping, rural middle-class, migrant group...always on the edge of the frontier and always moving away from European influence, social inequality, and the rule of the privileged class" (Krier, Stockner, and Lasley 2012: 59, 63; Fischer 1989: 611; Fischer 2005: 314).

The backcountry folkway originally consisted of Scotch-Irish or Borderland peoples of central to northern England. Besides having fierce clan loyalty, a "Borderer...might die for profit or family honor and saw little advantage in dying for his country" (Sadler 2005: 2). With a long cultural history of Anglo-Scots and Irish military battles, they also had a "tendency toward what was called New Light Christianity in the eighteenth century" (Fischer 1989: 615). Many joined small Protestant sects, including a militant sect called the Society People, or Cameronians, after the Scottish religious reformer, Richard Cameron (Fischer 1989: 616). These Covenanters are credited with "being the first pioneers west of the Appalachians and of opening the Mississippi

valley to British civilization”; bringing Presbyterianism with their migration; and “appealed” for ministers to travel to Scotch-Irish “desolate places” (Wright 1969: 22). These ministers, or circuit-riders, armed themselves and kept their rifles close as they preached; and “the men in (the) congregation(s) stacked theirs under guard at the entrance to the church, or hung them on the wooden pins provided around the interior of the building” (Wright 1969: 23). Often “hunted down like animals and hung” (Fischer 1989: 616) in the central England backcountry, the Cameronians took up arms during the “killing time”, a period of conflict in Scottish history between the Presbyterian Covenanter movement and the English Kings Charles II and James VII. Roughly from 1680 to the Glorious Revolution of 1688, this era included the use of the death penalty for preaching in open, rural fields; torture by the thumb and screw; and field executions of those caught with arms or those who refused to swear loyalty to the King and renounce the Covenant (i.e., a 1643 agreement between the Scottish Covenanters and English Parliamentarians). In response, the surviving Cameronians or Covenanters were known to “worship defiantly with a Bible in one hand and a weapon in the other,” slaughtering the forces sent to suppress them (Fischer 1989: 616).

The Cameronian warrior mentality, fighting for their people and not for national pride, with a chemistry of combative militancy and religion, was later manifested in the formation of the Scottish rifle regiment, the Cameronian Guard, in the British army. “Known as Covenanters, militant Presbyterians, also known as United Societies, or Hillman, these Scotsmen practiced an austere and unyielding form of religion which demanded discipline and obedience, prepared to fight for their beliefs, meeting in secret” as necessary, to create not just a formidable fighting force, but a force to remember that “one of their main tasks was the protection of the

Presbyterian religion” and “the preservation of the Reformation in Scotland, in opposition to Popery, prelacy and arbitrary power in all its branches and steps” (Royce 2009: 15, 16).

Formed in 1881 under the Cardwell Reforms by the merger of two other regiments: the 26th Cameronian Regiment (1689) and the 90th Perthshire Light Infantry (1794), a partial and brief history is chronicled as follows:

“The original Cameronians were zealous Covenanters. Their devotion to the National Covenant (1638) and the Solemn League and Covenant (1643) meant that they would even do battle to defend their freedom to worship as they chose. Their heartland was in south west Scotland, in Galloway, Ayrshire, and in Clydesdale in particular. When the crown ejected ministers from their parishes for refusing to submit to the rule of bishops, the Covenanters followed them to the hills and worshiped at open air services which came to be called conventicles. As the threat from government forces increased the Covenanters began to carry weapons to their conventicles and to post armed pickets to keep a lookout” (The Cameronians 2016: n.p.).



Image 2.1. Cameronian Soldiers. 1689.

Today, some fondly reminisce about this regiment and note, “Basically, the Cameronians were a bunch of bloody minded Glaswegians” (The Telegraph 2013: n.p.). Indeed, the regiment was not so fondly looked upon by the enemy and was dubbed the derogatory nickname, “The Poison Dwarves, or *Giftzwerge*”, by German infantrymen, reflecting the character of the embattled, unyielding, courageous, borderland Scotsman, during the first World War (Royce 2009: 12).

This moniker has lingered somewhat when revived as Cameronian troops participated in barroom brawls with civilians in Minden, Germany in the 1960s (The Telegraph 2013: n.p.). The modern-day Poison Dwarves’ motto, *Nemo Me Impune Lacessit* (i.e., Nobody Attacks Me with Impunity), epitomized the Cameronians’ or the Scottish Rifles’ historical resolve as militants to thwart the Stuart monarchs’ attempts to outlaw Presbyterianism and impose bishops on the Church of Scotland. The last vestige of the Scottish Rifles was represented by the Cameronian Regiment of Foot (Royce 2009: 192). It disbanded when it refused to align with another regiment in the British army in 1968. In a sense, the Scotch-Irish Cameronians were not simply justifiably militant over a three-hundred-year period, but were also “militant moralists” (Evans 1969: 74), defending not just their homeland and clan structure, but their religious faith-territory to the death.

The Cameronians established the Reformed Presbyterian Church. The Reformed Presbyterian Church’s principles include (1) opposition to government interference, (2) a contempt for church government by episcopacy (i.e., a hierarchical structure of bishops regarded as “popish”), and (3) the elimination of other non-Presbyterian influences, including

all traces of Catholicism (i.e., declaring that “Papacy should be removed from our land”) as sought within the negotiations of the Solemn League and Covenant, a political treaty ratified by English Parliamentarians in 1643 (Glasgow 1888: 57). These guidelines are contained in Glasgow’s History of the Reformed Presbyterian Church in America. Glasgow (1888: 53, 54) maintains that the “Reformed Presbyterian Church in America is, and always has been, one of practical dissent from the Constitution of the United States”; does not allow allegiance to its “constituted civil government”; and requires “stand(ing) aloof from such a government and (a) refusal to incorporate with the political society” (Glasgow 1888: 22). The church’s “Terms of Communion” confirm Glasgow’s position. A segment of it portrays the steadfast nature and religious ancestry of the Scott-Irish Cameronians and Reformed Presbyterian congregants:

“The Reformed Presbyterian Church in America is the lineal descendant and true representative of the Church of Scotland in her purest days, and embraces her testimony and the principles of the Second Reformation as exhibited between the years 1638 and 1649. The Presbyterian Church of Scotland was a Covenanting Church, and the Reformed Presbyterian Church of this age is not a branch of any Presbyterian body but the remnant of the original stock. While the Synod of this Church is among the small ecclesiastical assemblies, for that reason she should not be regarded with reproach. Her principles are both scriptural and unpopular, and neither the paucity of her members nor the unpopularity of her principles prove that the position of the church is unsound or impracticable.” (Glasgow 1888: 24)

These churches migrated across the American frontier with the backcountry settlements. By 1888, there were ten Reformed congregations in southern Iowa counties, three in northeast counties, and one in the east along the Mississippi River (Glasgow 1888: xii). The first Iowa Presbytery (i.e., a body of church elders and ministers or an administrative body representing all the local congregations of a district) appears to have been organized on June 3, 1863 (Glasgow 1888: 781). All the congregations West of the Mississippi River Most of these

were founded in small towns or townships outside small cities. One of those small cities is Clarinda, Iowa.

For several reasons, Clarinda, Iowa, in Page County, a small city of about 5,550 residents located in deep southwest Iowa, may be the archetypal example of the backcountry folkway in Iowa. It is home to the Clarinda Reformed Presbyterian Church and Covenanter Cemetery with demographic patterns fitting rural Iowa. Between 2000 and 2010, Clarinda lost 118 inhabitants, or 2.1 percent of its total population (U.S. Census 2010; and Iowa Data Center 2010: n.p.), exemplifying rural Iowa's continuing loss of population. By the 1980s, it had lost all of its five rail lines that went in five different directions and is one of a growing list of rural county seats without rail service. It is ninety-two percent white, the median age of 38 is much older than urban Iowa, the median household income is about \$38,000, less than seventeen percent of those 25 years of age or older have a bachelor or higher degree, almost ten percent of the population are military veterans, Republicans outnumber Democrats almost three to one, and Protestants outnumber Catholics ten to one. The southeast area of Clarinda was once labeled "Gun Town" and to this day is known by this name. In the 1920s and 1930s, Clarinda appeared to be two separate towns: "Guntown and Uptown" (Seeley, unpublished work, *Guntown: My Hometown*: n.d.). In a telephone interview with a local Clarinda historian, the Guntown area was identified as the local stockyard and rail yard, and gunshots were common throughout the day and night.

Southwest of Clarinda, in Page County, on the Missouri-Iowa border, is the original site of the Long Branch Reformed Presbyterian Church. Obituaries from the early twentieth century indicate relatives of the deceased living in Reformed Presbyterian church locations in rural

Iowa, Ohio, and Pennsylvania at the time of death (O'Dell 2016: n.p.). In addition to deaths by consumption, drowning, cancer, general neuritis, burning, typhoid pneumonia, heart trouble, old age, and influenza, these obituaries note two accidental deaths, one homicide and one suicide, each by firearm. These also reveal the passing of several Civil War veterans from the Clarinda area.

Carr and Kefalas (2009: 88) endorse an assessment of rural Iowa's strong approval of young persons joining the military to fight for their community in times of war. It makes sense financially to the many economically disadvantaged, rural youths; community members bestow great honor on those who bear arms; and enlistment fits neatly with young, rural, military enlistees' perception that they will fight for "their people", their family, friends, and neighbors in their small towns and not out for national pride and obligation (Carr and Kefalas 2009: 93). Carr and Kefalas (2009: ix, 4, 5, 6) also emphasize the prominence of a shared, economically and socially debilitated, rural Iowa mindset; this sustains a more traditional lifestyle, rejecting outside influences or views and displaying an inability to adjust to new economic constraints and realities (e.g. "the intrusion of technology") placed on rural Iowa by an economically ominous outside world. Finally, these researchers support the contention that there was and is a distrust for government and its encroachment potential.

These factors solidify and reinforce a traditional socialization process to include gun ownership, carry, and use. In this context, behavioral expectations, a personal sense of self and identity, and social roles remain stable over time as individuals "understand and portray how they are unique when compared to other persons across society" (Simi, Futrell, and Bubolz 2016: 493). For many rural inhabitants, gun-related roles instruct an important "identity

commitment” (Simi, Futrell, and Bubolz 2016: 493). This instructs frequent gun-related behavior. Social institutions and their doctrines and traditions remain more easily intact as well. Economic, political, and social forces preserve their domains and interact to maintain order, regulate decisions, and the decision-making process. These forces demand and achieve compliance. This instructs frequent gun-related behavior. In the cultural landscape of rural Iowa, social institutions’ gun-related dictates transmit some of the more important aspects of rural culture.

If Iowa’s backcountry culture is militaristic, agrarian, and religious, its urban cultures may be characterized by complex, frequent, and open behavioral and information exchange. Urban processes must help facilitate rapid change and growth, while developing coping mechanisms for friction. These responses generate potential, additional volatility and instability.

Thus, county and city governments in Iowa have sought ways to control the use of firearms in their jurisdictions. Gun groups, including the Iowa Firearms Coalition, object and suggest these steps conflict with handgun carrying law. Nevertheless, many cities, including Burlington, Tama, Cedar Rapids, Iowa City, Ames, Sioux City, Dubuque, and Mt. Pleasant have debated and in some instances, imposed gun restrictions for public safety purposes. Many county governments have elected to outlaw firearms on county and city property.

Gun-Related, Economic, and Cultural Considerations in Rural Iowa

Iowa’s rural counties never needed the 2011 permit to carry law since the freedom to obtain the permit was not a newfound freedom. Historically, gun demand has been high in this environment. Johnson (2008: 847) posits that supply-side economics and restrictive gun

control policies are compromised by cultural and social structural factors that will always produce a rural “remainder problem”. Johnson (2008: 838) continues stating: “Effective supply-side regulation requires earnest pursuit and eventual achievement of an environment where the civilian gun inventory, both legitimate and contraband, is very small (“the supply-side ideal”). “But, because of the number of firearms already in private possession, new, restrictive gun, public policy meant to restrict new purchases will not reduce this inventory (Johnson 2008: 838). Using Johnson’s argument as foundational, supply-side gun restrictions will not attenuate higher gun inventories. And, with few incorporated cities across the rural landscape and little supply regulation from county sheriffs not inclined to deny permits, any existing handgun permitting restrictions have been inconsequential. With little political or social incentives to reduce the existing inventory, guns have been and continue to be easily procured and carried. Nevertheless, with the advent of the new law, many additional, rural Iowans took the opportunity to seek a permit to carry. Supply increased, following demand, and demand was immediately fulfilled with the less restrictive circumstances. Urban area demand appears to display a different view toward handgun permitting.

Cities, as viewed from the perspective of local handgun and firearm ordinances, have perceived a need for restrictive gun policy; the countryside did/does not. With a thriving rural gun culture, and with few if any gun-restricting, incorporated cities, the economic, cultural, and social conditions for the distribution and consumption of the product in rural Iowa have been exceptionally bountiful. Gun regulations don’t fit well in rural areas for other reasons.

Rural values or normative judgments prevent supply regulation and situate rural permit to carry issuance policy as historically nondiscretionary. These gun values are isolated and

unique from the urban area, discretionary, permitting practice. As one of many, gun-related normative judgments, the distrust of government, and perhaps the inability of governmental law enforcement to protect, and value for individual independence may result in a “defiance impulse” (Johnson 2008: 838). Johnson (2008: 850) noted: “These limitations are no surprise to many rural people, who live far enough away from police that public security is always more abstract than real-people for whom defiance might be the norm”. The distrust includes not just a perception of overzealous government intrusion, or government incompetence, but perhaps most important of all, of so many families being left out of the American dream. At present, we can observe candidates for national office veering far left and right in economic policy, not just suggesting the demise and disenfranchisement of more and more Americans, but submitting some facts and data to illustrate its reality. The distrust is of special concern when focused on protection of self or family. National, state, and local law enforcement efforts are notably reactive and resources can be limited. Accordingly, if gun restrictions, no matter a result of local judgment, or at the state or federal level, are put into place, how many rural inhabitants might not comply? Johnson (2008: 851) in speculating that perhaps a majority, states “The risk seems real that many Americans will not cooperate, starting with the truly bad among us. Self-help, on the other hand, requires a gun, competency with it, good judgment, and some amount of luck-variables that seem more subject to personal control”.

This is part of a “go it alone” mentality. Take care of oneself is emphasized, for others, including government, can’t and won’t do it. This leads to additional isolation and independence. In accordance with this isolation is a natural independence of economic thought and behavior surrounding gun acquisition or consumption.

These can be described as cultural “structural barriers” that offset both the supply-side ideal, complete gun regulation, or a modicum of a diminished supply of guns (Johnson 2008: 839). One of these is the U.S. Supreme Court’s decision in *Heller* versus Washington, D.C. “formally block(ing) the supply-side ideal” as it “plainly bars laws intended to cut supply to zero” (Johnson 2008: 839). Another, individualism in rural Iowa translates into a gun-needy culture that has defeated urban needs. This presents as a classic case of Pareto efficiency or Pareto optimality, as the rural gun condition is viewed through the lens as optimizing one’s own position at the expense of most others. The rural economic man integrates efficiency, neglected equality, and does not consider a socially desirable distribution of the gun as a resource, or take the general well-being of society into account. These factors are also part of a driving force behind rural gun economics. Given this, the rural view of a fair and just social setting involves a rural culture that has been reinforced and liberated from outside constraints that inhibit or damage the rural gun-culture, its perception of individual liberty and rights, and the gun’s symbolic and utilitarian roles as a uniquely useful tool in rural social structural development. Government intervention via gun regulation, in accordance with a paternalistic agenda that assumes to make better gun decisions for rural settings, would not be perceived as improving rural social welfare or well-being by rural inhabitants. Instead, it would be perceived as violating rural autonomy, liberty, and destabilizing its gun economics. As Johnson (2008: 856) relates, the NRA has stated: “The American attachment to the gun is exceptional; we own close to half the world’s private firearms; and buy half the world’s output of new civilian guns each year”. Agents involved in the gun economy, the manufacturers, those in marketing roles,

distributors, and local individual buyers and sellers, are much freer to act and effectuate their gun-objectives in this setting.

Those with affiliated interests, such as the National Rifle Association, the American Legislative Exchange Council (i.e., ALEC), the National Shooting Sports Foundation (i.e., NSSF), or gun-rights ideologues, and some elected and appointed government officials and politicians have found promising economic positions within this unregulated, gun, economic environment. Underlying these gun interests has been the need for group sustenance, resiliency, and superiority along socio-economic, racial, ethnicity, religious, and political lines, stimulating and perpetuating gun acquisition and carrying. Some speak of the optics of the cultural war that gun enthusiasts must endure to sustain their group and their kinship with guns.

For instance, in 1997, Charlton Heston, at the time the first vice president of the NRA, spoke of rural, gun-active Americans as “victims of the cultural war” in the following manner:

“Heaven help the God-fearing, law-abiding, Caucasian, middle class, Protestant, or even worse – Evangelical Christian, Midwest, or Southern, or – even worse – rural, apparently straight, or – even worse – admittedly heterosexual, gun-owning or – even worse – NRA-cardcarrying, average working stiff, or – even worse – male working stiff, because not only don’t you count, you’re a downright obstacle to social progress” (Diaz 2013: 192).

This gun economy is inspired by and infused with perceived rural-group survival needs as evidenced by Heston’s xenophobic remarks.

Fundamentally, the number of gun permits issued has been greater in the rural setting due to the de-regulated gun economic environment. (For that matter, even if Iowa public policy moved back toward a more restriction supply regulatory condition, it is doubtful that many would comply with some if not most of this change unless regulatory measures could

force compliance.) But it not just Iowa's rural cultural environment energizing its gun economy. Other forces in this gun-rich social environment sound alarms of concern.

As handgun permit rates took off at a statistically significant rate for the most rural counties in Iowa compared to the moderately rural, urban, and technocratic/professional areas in 2011, it is quite likely that America's "democratic process" generated some concerns for rural gun buyers (Johnson 2008: 866). The new 2011 handgun law preceded the 2012 presidential contest. The presidential incumbent had previously called for a complete handgun ban across the U.S. So, with the new, non-discretionary law in place, and an anticipation of additional or more substantial supply regulations in the background, a rush to market may have occurred (Gabelnick 2006: n.p.). The study's data also shows that after the 2011 rush to market in Iowa caused a fulfilled demand, or saturation point, followed by a steep decline in permits in 2012, and a homogeneous, rebound demand for handguns across county types in 2013. This rebounding demand for handguns may have been a result of handgun owners anticipating stricter gun control laws, which might diminish access to many types of firearms with the re-election of Barack Obama in 2012 (Sherfinski 2013: n.p.). In fact, President Obama did sign off on twenty-three, gun-related, executive actions and proposed twelve congressional actions in his second term (New York Times 2013: n.p.).

Indeed, the 2011, Iowa, non-discretionary, handgun law may have been a delayed reaction to national events from 2000 to 2008, during the George W. Bush presidency and as the Republican party took back Congress in 2004. The broader, national gun rights movement may have caught on in Iowa. The Iowa legislature was incentivized to act believing it was to Iowans' benefit and not to their detriment to handgun carry. This study's data and statistical

analysis offer credibility to the argument that these factors worked together to inspire the rural gun economy more than the urban gun economy in response to the 2011 law.

This interaction coincides with localized application of gun permit law; and rural application of gun permit law has been forgiving. In turn, the rural Iowa gun culture interacts reciprocally with national gun interests, each entity serving one another to create a synergistic, gun-rich setting. National gun interests are perhaps most vociferously represented by the National Rifle Association. Cummings (2007: n.p.), Diaz (2013: 199, 200), and Wilkie (2014: n.p.) have described the NRA as a substantial contributor in local, regional, and national efforts to control gun legislation and regulations; calculative and politically shrewd; and ensures it has very effective and frequent communications with its constituency. The NRA limited its media footprint after the shooting/killing massacre at Newtown, Connecticut in expectation that the public would forget in time, describing the immediate public outrage toward guns as the “Connecticut Effect” (Keyes 2013: n.p.). Indeed, I joined the NRA a few years ago to facilitate this study, did not continue the membership after one year, yet continue to receive fairly constant and substantial communications from the NRA.

Diaz (2013: 191) argues that the NRA’s “religion is more than about guns”, principled upon “socioeconomics, race, ethnicity, the modern politics of the old doctrine, Manifest Destiny, and Anglo-Saxon singularity”. Melzer (2009: 16, 45, 48) maintains that the NRA promotes a “frontier version of masculinity; a mythologized, historical, gun culture of white, rural, Anglo-Saxon Protestant heroes and expansionists waging war with natives; “casting (members) as heroes and warriors...protecting American freedom”; in an environment that “marginalizes and threatens their masculinity, power, and freedoms”, through social

movements that may provide equal access to health care, education, employment, and housing for subservient groups of persons, “urbanization, immigration, and industrialization”.

Iowa’s most rural areas’ socio-demographics indicate a fairly narrow display of white, Evangelical, Protestant, Anglo-American mixed in with increased economic and social FUD (i.e., fear, uncertainty, and doubt) (Knox 2008: n.p.). Diaz may have a point, correlating socio-demographics and group superiority intent with the NRA’s intentions. However, it is advanced that it would be quite a leap to suggest that most rural Iowans have sinister intent to harm one another or those living outside their bucolic environment via the handgun. Nevertheless, in rural Iowa, the demand for guns has always been high; and all who wanted and want handgun permits in rural Iowa, acquire these, in concert with either a regulated or deregulated economic setting. Urban America, including Iowa’s urban centers, sits in contrast.

Historically, in the urban setting, gun permit acquisition is low. Demand is low. In Iowa, issuance was previously regulated via discretionary power at the local level. Prior to 2011, Iowa’s discretionary permit law affected the handgun permit issuance rate. Lott (2000: 131) has maintained: “giving government officials discretion in who gets permits, reduces the percent of adults who get permits by more than two-thirds” and “...in rural areas, permit requests already were being approved; hence it was in urban areas that the number of permitted concealed handguns increased the most”. To some degree, this has changed in Iowa with the 2011-gun permit law change relieving local officials of their power to control and regulate. After the 2011 law change, one eastern Iowa, urban county sheriff counted 381 permit applications that he would have previously denied in a year. He was required to approve these. Otherwise, the sheriff would have had to petition to have the law changed to

deny any of these approved permits. Permit denial also presents a monetary outlay for a county if the denied applicant appeals the decision to the state. No matter whether the denial is upheld or not by the state, the county sheriff budget is assessed a \$175.00 fee by the state.

Various urban Iowa sheriffs have stated that permit demand has increased as result of people “get permits because they can” when they previously could not and “people found out how easy it was to get one and took advantage” (Cedar Rapids Gazette 2014: n.p.). The law change most likely brought out many who would not have been able to obtain permits in the first place. It is estimated by some researchers that if more stringent regulation were required, to include allowing government to confiscate guns, the compliance rate would be extremely low. The urban gun economy has changed to some degree; now, just as in the past in rural counties, those in urban counties wanting handgun carrying permits shall have these if desired. It is projected that this study’s results will reflect a change in Iowa’s rural and urban gun cultures. That change: each will be more accepting of handgun carrying.

Conclusion

This chapter examined a theoretical explanation for rural Iowa gun culture and activity. It reviewed America’s gun culture and history. And it examined Iowa’s folkway history and its relationship to guns. Iowa handgun law was studied. Iowa population and its patterns and additional socio-demographic variables of cultural descriptive value were described. Gun-related, rural and urban, economic considerations were reviewed to prepare for a quantitative analysis of handgun carrying. Long guns are not part of this analysis. Long guns are culturally embedded in rural society, but do not tell the story implicating handguns as instruments meant to kill other humans (Slotkin 2013: n.p.). In addition, they do not explain the intent to be

engaged in a particularly more active gun activity: carrying the weapon into cities. They do not in any way explain the gradual and steady increase in handgun permit acquisition activity in Iowa; they do not explain handgun permit acquisition activity differences by county type over the last two decades in Iowa; or whether urban or rural culture significantly influences handgun permit rate change over time.

This chapter provided a theoretical understanding of Iowa's gun culture through a historical, biographical, and economic portrait. It revealed more than a tendency toward handgun ownership and carry-permitting history in Iowa's most rural areas, with more gun-passive behavior in urban county types. It reviewed Iowa's rural history in the context of the gun. It explained that Iowa's southwestern, Scotch-Irish backcountry, rural culture is centered around individualistic, non-communitarian views; economic and social isolation; a particular religious history; an aging, racially and ethnically homogenous population with a lower formal education level; a strong role in the defense of the community via military service; and a concentration of membership in one political party. The review provides reasonable evidence to categorize Iowa, particularly the most rural and isolated segment of Iowa, as having an extremely vigorous gun culture.

CHAPTER THREE: DATA AND METHODS

Introduction

This study examines handgun permit to carry rates by Iowa county type. The study asks four questions: (1) Is Iowa handgun carrying explained by a strict rural-urban handgun difference, or is it more complex? (2) If it is more complex than a simple rural-urban split, what measures produce distinction? (3) How did Iowans immediately respond to a non-discretionary, 2011, Iowa, handgun permit law? (4) How did Iowans respond to the same law over time?

To do this, the first aim of this study was to separate counties culturally. Then, it examined whether different handgun permit to carry issuance rates existed between the various categories of rural and urban counties. After this, the rate of change in handgun permits, before and after the enactment of the 2011, Iowa handgun permit shall-issue law, was examined to determine if there were statistically significant differences between county types' rates of handgun carrying permit change over time.

It is maintained that present, Iowa, handgun permit law supports the needs of rural Iowans and does not fit the needs of urban Iowans; that rural and urban populations are different culturally and that this is reflected in their handgun carrying permit rates; that with handgun law change, rural and urban Iowans will respond differently in their handgun permitting activities in accordance with their cultural differences; and that the rate of handgun carrying permit change for rural and urban county types will be essentially the same due to cultural stability within rural and urban populations. The importance of this study is emphasized as it shows that the universality of Iowa handgun permit law is beneficial for various rural Iowa county types, but is not for the urban environment. If it were, then urban

Iowans would exhibit a more robust handgun carrying permit rate than they do. This topic finds relevancy in contemporary cultural studies.

Gun Rights and Control as an Issue for Review

Guns rights, gun control efforts, and how guns can and are used are of concern to the general public. More specifically, a handgun “has higher utility in situations where quick access and close-quarters ergonomics are higher values (Johnson 2008: 862). Johnson (2008: 862) notes these situations include “tense moment(s) of private self-defense” that can result in serious injury and /or death. Gun rights activists and gun control advocates, criminologists, public health officials and researchers, and community leaders all may benefit from this examination of Iowa’s, recent, handgun permitting trends, how these may impact community well-being, and use the data and findings to construct appropriate gun policy. Social scientists, public officials, community leaders, and all others need to review our cultural attachment to the gun and seek new ways of adjusting to a more dangerous world that includes the handgun as a strangely-twisted form of weapon of mass destruction. Social scientists in particular need to uncover latent social factors that associate with deleterious gun use. The focus on the individual to explain this behavior makes little sense. Cultural changes in response to economic, social, and political forces, in addition to individual responses, that connect with gun activities require ongoing study.

These studies should not remain in academic journals for just a few to ponder. Most of the time, sociologists appear to be left out of gun discussions. The psychologist, law enforcement officer/spokesperson, the constitutional law expert, the military response specialist, the medical forensic scientist, the terrorism expert, the gun control or gun rights

advocate, the local politician most recently affected by the gun and most responsible for a compassionate response, the government administrator in charge of the institutionalized political response, the flippant radio talk show host, the comforting theologian, the television analyst-on-the-scene, and it seems most anybody else with an opinion, is called upon to give their supposed, learned analysis.

An occasional sociologist does appear once in a while in the news media beyond the occasional criminologist, entering an opinion that millions of individuals have an opportunity to evaluate. But not too often. Complex social challenges require an awareness of social change, globalization factors, technological advancements, cultural factors, and history. Sociology, in this way, is not taken as seriously as it is seen as inexact and unable to focus on an individual or individual variable to explain causation as some other disciplines. This is despite that fact that if someone decides to listen and evaluate its offerings in the limited, acceptable settings it is now “practiced”, the listener seems to appreciate the information. In light of this, this study may have limited capacity for effecting change as well. Not to be dissuaded by these barriers, this work deserves academic follow-up.

It is not surprising that sociologists have “settled” for a limited role in society. The discipline has been forced into this role as individuals and political communities look for easy answers to complex challenges. Technological advancements come first, in the context of capitalistic objectives, generating additional research focused on technology and profit, and guiding any focus away from important social, intellectual, and institutional issues (Postman 1992). These advancements produce a new reality and offer opportunities for understanding our infinite social and psychological worlds. Sociologists reactively evaluate new cultures within

a limited social universe. This limitation is not self-imposed. Sociologists may have some positive effect on society, but it appears small partially since it is perceived as unassociated with the production of the metaphorical, American, social and economic quilt, and, if anything, its contribution is difficult to measure.

Sociologists' understanding of modernity is too abstract for the general public to readily accept. When the media accepts sociology's terms and concepts, and popularizes these through its own use, the public then begins to understand, in a limited manner, what has happened to itself; this is not enough to placate fear.

For instance, Giddens (1989: 301 and 1990: 21) and Elias (1939: 131 and 1939: 234) may instruct via an understanding of modernity's "shattering impact" and its "total reorganization of the social fabric" as accomplished via a people "increasing differentiation" process and structuration sociological theory. Despite their insights, most of their contributions are not for popular consumption. Giddens's (1990: 19-21, 27, 38) impression that physical presence is no longer necessary for at least some communication, relationship building (and undermining), and the linking of local and global spheres as social systems are stretched across time and space via "distanciation"; that expert systems create arenas of material and social settings for "disembodied" persons, reducing risk across time and space, while displaying impenetrable control and domination as information is more esoteric and visibility is diminished (e.g. legal and medical fields of expertise); and "reflexivity", in which every social practice is "constantly examined and reformed, thus altering their character" (i.e., I interpret this as not just the social environment, but also the self). This leaves modern human with a dearth of connectivity with the past and "authentication by tradition"; thus "leaving us with a pervasive sense of

uncertainty” and a “presumption of wholesale reflexivity” (Giddens 1990: 38, 39). In this sense, new information destroys “intrinsic connections with the past” and the social system and its participants accept the past or tradition only if it can be rationalized within the context of new discovery and in its diminished role is accepted only in the reactionary or “reflexivity of the modern” (Giddens 1990: 38). Modernity has also created a lack of trust as there is a “lifting out of social relationships from local context of interaction and a restructuring across indefinite spans of time-space”; the shift in trust from the individual in pre-modern societies to a trust in “symbolic tokens and expert systems”; and social participants’ lack of understanding that trust is actually embedded in “abstract capacities” and not the individual (Giddens 1990: 26). These expert systems are “disembedding mechanisms” as they are able to “remove social relations from the immediacies of context” (Giddens 1990: 28). In essence, individuals need to know or understand lessens as modernity’s expert systems and symbolic tokens flood the social environment. Each person’s need to acquire and nurture relationships with one another is severely reduced as well as these abstract systems take control of knowledge and the element of trust. These abstractions have debilitating effects on humans, as they are carried away by these systems’ intensity and pervasiveness. Trust in abstract systems can additionally lead to elements of “psychological vulnerability” as trust in an abstract system is different from trust within a human-with-human relationship (Giddens 1990: 114). In the latter, “mutuality of response and involvement” and “trust, the integrity of the other” connect with “authenticity of the self” (Giddens 1990: 119). The self, without these relationships, is inauthentic; may search for a more personalized social environment without the routines “structured by abstract systems” with “empty, unmoralized character” (Giddens 1990: 120). This search may be largely

unsuccessful as abstract systems “disembed social relationships across space and time”, and are instrumental in the development of new and profoundly damaging, psychological, social, economic, and political injury in modernity (Giddens 1990: 151). Giddens’ ideas seem to correspond with Elias’ thoughts of a more “automatis(matic)” human in modernity, dominated by a more “stable, complex, and regulatory system that controls conduct”, producing a “self-compulsion (to comply) that cannot (be) resisted even if (an individual) consciously wish(es) to”, a sublimation or repression of individual emotion that objectifies the individual so it fulfills a more differentiated set of social functions (Elias 1939: 232, 233). In this vein, humans become more sensitive to incrementally more subtle threats and actions and can be compelled to unleash behaviors within “systems of disturbance” produced by the modern social structure’s oppressive constraint system that are transformed into a potentially episodic, unsuccessful, self-constraint system correlating with social location, the “condition of society”, and individual economic condition stressors (Elias 1939: 242, 243). In an unconscious manner, the gun may be perceived as equalizing or offsetting these threats and conditions.

In the end, Iowans in general, and social scientists in particular, need to take a more thoughtful look at social relations in modern America vis-à-vis the gun and to what degree the socio-political, gun movement is flourishing in Iowa. The American, gun culture is our culture; it is not a separate culture. Attention is drawn to this in this study.

The American culture has now evolved to the point that many persons believe it is reasonable to walk in a city with a semi-automatic, hand-held or long arm weapon slung over their shoulder, cradled on their arm, or poised in their hand. Television and other social media images of these postures are shown as these persons mingle with large groups of people in

cities. These persons appear to be prepared to open fire and at this point draw little attention or concern prior to a destructive act. Such behavior is now considered appropriate and normative.

How have we come to the point that we allow people to walk casually in a social setting with tools to kill others and maintain that each person has the judgment necessary to use these weapons judiciously? How have we as a society gotten to the point that we feel so unsafe, generally and fearful, or self-absorbed that we readily carry weapons to kill one another? How have we gotten to the point that we have to even ask these questions? How have we gotten to the point that some reading this work will question the incredulous tone taken at the moment?

Is Iowa prepared for its own, gun-related, “perfect storm” unfolding before our eyes across America? It arguably needs to be. Accordingly, an opportunity is offered to consider the relevancy of how many handgun permits to carry are issued; where these are issued; and why these are issued at an increasingly pronounced rate across Iowa. As years pass, the rates have risen every year except 2012, and this was due to a realized, gun market saturation point. We shall see how handguns, and for that matter, other small firearms, affect Iowans as their number increase year-by-year. This study documents one aspect of the continuing, invigorating, emotionally-charged, pulsating, and swelling essence of the weaponization of America throughout Iowa in this work.

The Study’s Importance

In America, the twenty-first century has experienced a notable increase in gun purchases and concealed carry permits. The NRA’s 2010 estimate of 300 million privately owned firearms for a U.S. population of 308 million persons and the ATF’s estimate of 319 million privately

owned firearms has been updated by others (NRA 2013: n.p.). It is now estimated that America has more guns, about 357 million, than human beings, at about 323 million (Congressional Research Service, Washington Post 2016; n.p.; U.S. Census Bureau 2016; n.p.). It has more guns per capita than any other nation in the world. This correlates with some rather devastating results.

America has the most gun-related homicides among the world's developed nations. Our degree of "lethal violence" outstrips countries with similar social, political, and historical backgrounds (Hemenway 2004: 2). In contrast to Canada, Australia, and New Zealand, "most of our murderers use guns"; and with a much higher murder rate, we our "gun/lethal violence... worse" (Hemenway 2004: 2). The U.S. has a gun homicide rate 25.2 times higher than 22 other Organization for Economic Cooperation and Development (i.e., OECD) countries (Grinshteyn and Hemenway 2016: 273) and a "much higher suicide and homicide rate when comparing the U.S. to "twenty-five other high income countries" for "violent deaths of five to fourteen year olds" (Hemenway 2004: 2, 3). Suicide in the U.S. also correlates positively with firearm use. Of the 41,149 suicides in the U.S. for 2010-2013, more than half, 21,174, were by firearms (U.S. Centers for Disease Control 2014: n.p.). More people kill themselves with firearms than "all other intentional means combined" (Drexler 2011: 1). If the firearm is in the home, it is a major risk factor for "suicide death of the gun owner, the spouse, and children" (Hemenway 2009: 159). From 2010 to 2013, there was a nine percent increase in the number of suicides by firearm in the U.S. Eighty-five percent of suicide attempts end in death (Drexler 2011: 1). "In places where exposure to guns is higher, more people die of suicide" (Drexler 2011: 1). Firearm-related suicide rates are eight times higher in the U.S. when compared to other high

income countries (Grinshteyn and Hemenway 2016: 273). In 2010, ninety percent of women and eighty-two percent of all people in these high-income countries killed by firearms were killed in the U.S. (Grinshteyn and Hemenway 2016: 273). The devastation does not stop with homicide and suicide.

Accidental firearm death and injury are part of America's firearm challenge. About 3,800 persons died from unintentional shootings from 2005 to 2010 (National Center for Injury Prevention and Control 2012: n.p.). Another study found that over one-third of the victims of accidental deaths by firearm were under twenty-five years of age and eight percent of shooting deaths resulted from children under the age of six pulling the trigger (U.S. General Accountability Office 1991: n.p.). (The same research estimates that about thirty-one percent of these shootings might have been prevented not only by decreased firearm household presence, but via child proof safety locks and loading indicators.) Persons living in states with the highest gun levels have nine times the rate of unintentional firearms deaths compared with the states with the lowest gun levels (Miller 2002: 267).

The number of permits to carry either concealed or in the open has increased as well. The number of permits has increased faster than the number of states allowing carry permits (Lott 2015: n.p.). In the U.S., the number of permits to carry has grown from 2.7 million in 1999 to 12.8 million in 2015 (Lott 2015: n.p.). The yearly increase has grown from about 240,000 in 1999 to 1.7 million in 2015 (Lott 2015: n.p.). These increases coincide with gun sales increases. Iowa ranks eighth in the nation in the percentage of the total adult population having a permit to carry a handgun. Of the top seven states, six are located in the south or are frontier states. These are Alabama, South Dakota, Indiana, Tennessee, Utah, and Georgia. Of Iowa's six

neighboring states, only South Dakota has a higher percentage of adults with permits to carry. Iowa's permit fees are reasonable; less than the national average. This, along with the timeframe that the 2011, Iowa, handgun law remains in effect, should or could maintain or increase the number of handgun permits over the years.

Urban centers, with generally higher violent crime rates than rural areas, should be concerned with the number of gun sales and permits to carry. Handguns can be misplaced, stored in an unsafe manner, and in some locations outside the home, such as a vehicle, are stolen and hard to recover. Presently, at least one, eastern Iowa, urban county has recently experienced a spat of stolen and unrecovered handguns from the owners' unlocked vehicles. At the national level, it is possible that anywhere from .57 to 1.5 million handguns are stolen annually (Benston and Vandall 2006: 362). This study begins to delve into handgun permit facts that many will find valuable in scrutinizing Iowans' general well-being and may find that additional, local gun laws may be more suitable for some social settings than others.

Several tasks were necessary to ascertain the association between handgun carrying and Iowa's rural and urban cultures. These tasks examined rural Iowa gun theory to test correlations between the most rural and remote, geographic areas' gun subculture and a component of firearm use historically considered bizarre by most Iowans. These results are compared with Iowa's urban centers as well. These urban centers are separated into two unique categories identifying each of Iowa's rural and urban centers as culturally distinct from one another. Using the handgun carry permit rates, it is theorized that handgun permitting has gradations of importance for different Iowa cultures.

The study also considers gun permitting behavior may change or may not change strictly in response to a notable, handgun law change; and that differential gun permitting behavior change in response to law change may or may not be a function of group cultural differences. This study tests previous research findings that urban counties experience a more significant handgun permit to carry rate change than rural counties after a handgun permit, nondiscretionary law has replaced a discretionary permit law.

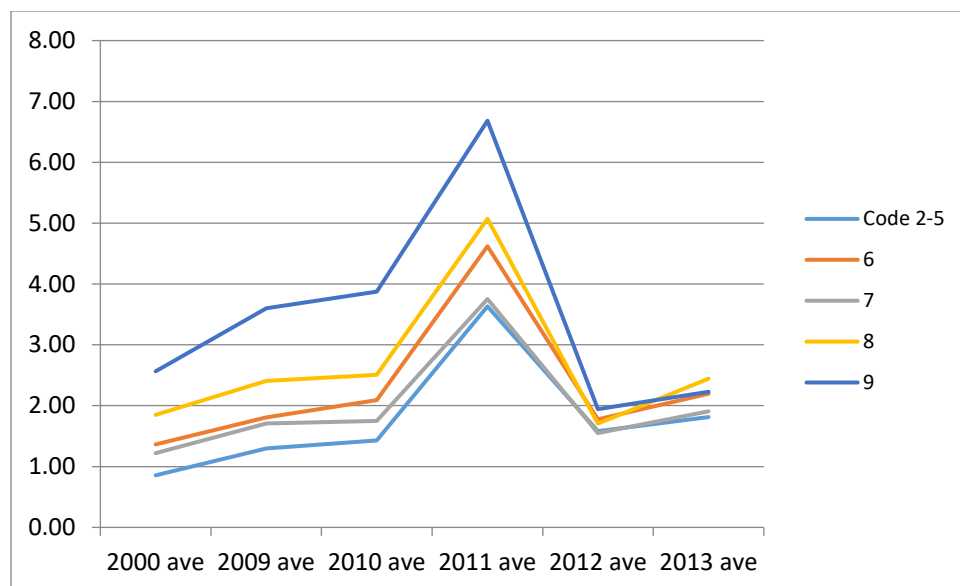
The study examines whether the two urban environments' changes are proportionate or disproportionate to the rural changes. Findings contradicting these previous research findings may lead to explanations beyond the law change and/or certain cultural aspects. Investigating this helps better understand various social and cultural environments, group values, and gun carrying behavior. This study informs that different social environments in a political community have different needs, priorities, and views of their world. Some of these aspects of the nuanced rural and urban Iowa cultures intersect with certain gun views, policy, and activities.

The study provides an opportunity for rural and urban Iowans to examine gun law and be a part of public policy gun debates and decisions. Blanket or comprehensive, gun-related, governmental decisions, whether judicial, executive, or legislatively derived, may not meet the gun-related needs of the dominant Iowa culture or some Iowa subcultures. Each social and cultural setting appears to have its own gun-norms based on perceived survival and safety features that require discrete guidelines, not public policy blanketing the social landscape. Accordingly, findings inform discussions of the suitability and functionality of a shall-issue, nondiscretionary handgun permit to carry law for rural and urban Iowa social settings and

contributes to reasoning that may stimulate the discovery of alternative, gun, public policy that protects and serves both rural and urban ways of life.

This investigation is placed in the context of America's gun culture, comprised of much more than gun "controllers" and gun rights "wingnuts", as each group has derisively labeled the other. Guns present contentious issues for Americans. Guns conjure up deep emotions for many. For some, guns symbolize and effectuate some American core values. For some, a life without guns is not worth living, jeopardizing one's independence, safety and survival, liberty, freedom, and self and group identities. Others only see the destructive gun results, mass murders, domestic violence including murder-suicides, children accidentally shooting themselves, playmates, or family members to death, and suicide. This study describes some of Iowa's gun culture in rural and urban Iowa to explain gun differences and quantitatively calculates some elements of gun use in Iowa for review and further analysis. Additional gun studies will require an outlay of much time and expense, but the inclusion of horribly destructive and violent gun-behavior in a description of America's gun-infatuated culture is inescapable. This calls for additional, on-going, gun study.

Iowa Department of Public Safety data show a steady increase in handgun permits issued in Iowa from 2000 to 2010; the pronounced increase in 2011 due to law change and other factors; the notable decrease in 2012 due to 2011 market saturation; and the 2013 recovery. Figure 3.1 shows these changes.



Source: USDA ERS RUCC (Rural-Urban Continuum Code).

Code 2-5 = Metropolitan and Micropolitan;

Code 6, 7, and 8 = Moderately Rural; Code 9 = Most Rural

Figure 3.1. Handgun Permit Issuance Rate by County Type for 2000 to 2013

Those carrying may anticipate confrontations while moving about in cities with handguns. The handgun carrying behavior has been described by some as eccentric, peculiar, and strange, but this study indicates such labels may apply less and less to gun-wielding Americans. More urban as well as rural Iowans are being approved to carry handguns. This study apprises Iowans and social scientists of this fact. An awareness of local and state-wide handgun carrying patterns is suggested as beneficial to further analysis of its effect on Iowa communities. The study offers information to consider as the nation and Iowans struggle to understand, cope, and respond to private and public firearm use, which includes some destructive activity. The study advances the position that Iowans need to question the need for more handguns and other weapon types in their urban and rural areas. This study's data and statistical findings offer an opportunity to review whether Iowa's shall-issue law makes sense

for all social environments in Iowa. If this law compromises safety or even if it does not, then additional gun rights laws, such as the “stand your ground” law, should generate additional, vigorous debate, reliable data, and statistical analysis to produce appropriate public policy. The “stand your ground” doctrine has been debated in the Iowa legislature in the last few years. As part of the gun rights movement, it is sure to come up again for debate in the Iowa legislature over the next few years. In this context, “stand your ground” and other laws liberalizing gun rights present a challenge for both rural and urban Iowans. Perhaps more so for urban America. These points of interest are studied with the thought that urban settings’ inhabitants may behave differently with guns based upon environmental characteristics and needs.

The importance of this study can also be assessed by noting past research with these data. State-wide IPIR data are compiled by the Iowa Department of Public Safety (i.e., IDPS). Prior to this study, no request for these data has been received by the IDPS. I requested this information from the sole provider, the Bureau Chief of the Weapons Permit Division within IDPS. This IDPS administrator controls access to these data.

No Iowa firearms study has separated long guns from the handgun permit acquisition activity for the aforementioned research purposes. No known study has formed similar, intricate, multifaceted categories of counties to separate counties, forming types of counties for handgun permit rate comparison. No study has explained handgun permit rate variability from strong cultural distinctiveness between several county types as counties were separated via numerous observable and measurable variables.

No previous academic research has established handgun permit issuance rates for Iowa’s ninety-nine counties as independent units to use for inter-county comparisons and the effect

each county type had on handgun carrying permit issuance rates after the 2011 Iowa law making Iowa a handgun “shall-issue” went into effect.

Previous, accurate research regarding who owns guns is difficult to obtain if accuracy is part of the formula. Some researchers may disagree and fail to admit to potential data deficits. Surveys are frequently used and these can be inaccurate (Lott 2015: 6). Permitting data are considered firm data by criminologists (Lott 2015: 7). But in some jurisdictions, accurate permitting information can be difficult to obtain. It is becoming more difficult to obtain as some states are reluctant to release this information due to new gun rights laws preventing release of information (e.g. North Carolina). In addition, permits are not required in up to ten states, at least one state only compiles data on out-of-state permits, and some data are outdated (Lott 2015: 4, 7). This is not the case for Iowa. Iowa’s permitting data is considered hard data, extraordinarily accurate and complete, and current.

What will the study show?

The findings will reflect that the concentration and intensity of one dimension of Iowa’s gun culture, handgun carrying permitting, is more associated with rural Iowa’s culture and less associated with urban Iowa culture. The findings will show that the difference in handgun carrying permits’ rate of change between various rural and urban counties was statistically insignificant as the new law went into effect and statistically insignificant after saturation. This showing of a homogenous, handgun-carrying-permit-rate-change-effect before and after saturation emphasizes an economic supply and demand influence. In contrast, the continued difference in mean handgun carrying permit rates between county types, not rate change, shows the constancy and stability of the different cultures in each county type. (See table 4.4

on page 130). Given the strength and endurance of the different county types' cultures, urban Iowa handgun carrying permit rates were universally lower than rural Iowa's throughout the time studied. So, even with a change in law, urban inhabitants did not find it as necessary to obtain handgun carrying permits compared to the most rural or moderately rural inhabitants. This is an indicator that Iowa handgun permit law does not meet the view or need for most Iowans.

The Study Tests Previous Research Findings

This study is the first to compile Iowa handgun permit to carry issuance data to investigate handgun permit rate association with Iowa's various rural and urban cultures. Limited, if any, previous research analyzing concealed carry weapons law, bans on assault weapons, or the effect of gun permit law change on *permits issued by county type, as defined by this study*, exist using Iowa Department of Public Safety data for all ninety-nine counties (Loder 2013: n.p.; Gius 2013: 266). Many studies have used cross-sectional and longitudinal data and regression methods, or have evaluated the use of each, in the analysis/evaluation of gun control law effect on criminal activity across many different geographic and jurisdictional areas (Gius 2013: 266; Koper 2005: 768; Lott 2000: 245; Black and Negin 1998: 218; Kwon et al. 1997: 533; Ludwig 1998: 413; Kleck and Patterson 1993: 40). In Lott's study, published as "More Guns Less Crime", Lott maintains that "it was in urban areas that the number of permitted concealed handguns increased the most (compared to rural areas)" (Lott 2000: 131). Lott (2000: 62) noted in his work:

"...counties with the highest populations were also those that most severely restricted people's ability to carry concealed weapons. Adopting nondiscretionary laws therefore produced the greatest change in the number of permits in the more populous counties."

In a discretionary law environment, Lott (2000: 145) concludes “some counties are extremely liberal in granting permits – essentially behaving as if they had nondiscretionary laws”. Lott (2000: 145) adds “more rural counties with relatively low populations were much more liberal in granting permits under discretionary laws” than urban counties.

These prior studies do not study Iowa rural and urban gun culture, the differences in *handgun permit to carry rates of change* in Iowa between two urban and two rural county types before and after the institution of a nondiscretionary handgun law (i.e., this tests Lott’s contention), and county socio-demographic patterns by county type for year-by-year *handgun permit to carry rate* comparison at certain points in time.

This work provides evidence that the most rural county type in Iowa has a profoundly distinct cultural heritage and socio-demographic composition from the urban county types and this correlates with extremely high handgun permit to carry rates. It describes the economic and social environment previously explained in which those wanting a permit shall receive a permit in rural Iowa. Lott’s findings dictate that the same economics will produce an urban response different from its previous response. So, for post-2011, this study’s results should not only show an increase in urban and technocratic/professional county type handgun rates, but there should also be a statistically significant difference between the two, Iowa, urban and the most rural county types’ handgun permit to carry rates of change after the institution of the nondiscretionary law. This work questions these assumptions.

Study Caveats

This work initiates an analysis of Iowa handgun permitting activity within the Iowa gun culture. The handgun permit to carry infers an intent to carry a particularly lethal, concealable, loaded weapon into an incorporated area within Iowa and perhaps beyond state borders. It is recognized that this will not always be the case; some receiving the permit will not carry. There is no reliable data that quantifies the percentage of those with carry permits who do not carry. This is left for additional research. Handgun permitting is not a proxy for Iowa handgun ownership rate or frequency. It is one indicator of a more active type of handgun use in that acquiring the permit goes far beyond simply keeping the handgun in a stationary state in one's home, perhaps unloaded, inconspicuous, secluded, and under lock and key. Long guns are not part of this study; a permit to carry is not legally required for long guns.

Separating Rural from Urban Iowa: The U.S. Department of Agriculture (USDA), Economic Research Service (ERS), Rural-Urban Continuum Code (RUCC)

Differentiating between rural and urban counties is a nuanced endeavor. The USDA ERS suggests “researchers employ many definitions to distinguish rural from urban areas” and “are responsible for choosing appropriately from alternative rural definitions available” or when “creating their own unique definitions” (USDA 2015: n.p.). USDA ERS county-level RUCC data have been available for researchers since 1974 with decennial updates through 2013. As a result, “researchers often divide urban and rural areas along county lines, making non-metropolitan the de facto economic definition of rural for most research purposes” (USDA 2008: n.p.). Most researchers apply a 50,000-minimum population to define a rural or non-metropolitan county (USDA 2008: n.p.). USDA ERS researchers also use non-metropolitan area

data to “analyze conditions in rural America”, reinforcing the alignment of definition for non-metropolitan and rural (USDA 2015: n.p.). The USDA definition of urban is also reinforced by the U.S. Office of Management and Budget’s (i.e., OMB) separation of urban from rural along the same, non-metropolitan, 50,000 population threshold. The OMB subdivides the metropolitan and non-metropolitan counties into three metropolitan and six non-metropolitan categories (USDA 2015: n.p.). The USDA RUCC coding follows this guidance.

The USDA Economic Research Services (i.e., ERS) RUCC scheme is one of the more comprehensive and accurate sources available to differentiate urban and rural counties. These data are derived from the U.S. Census Bureau. The USDA ERS maintains that counties are the “standard building block for economic data and for conducting research to track and explain regional population and economic trends, employment, and (annual) income...and social integration and labor-market areas” (USDA 2015: n.p.). The handgun permit measurement is more accurate and is the only hard data available; surveys and self-reporting techniques used by others to determine the presence of handguns and the very assertive activity of handgun carrying in Iowa are more open to inaccuracies. Others researchers have experienced a high percentage of non-responses in using a telephone survey (Hepburn et al. 2007: n.p.). This supports my use of the county as the unit of analysis.

Rural definitions can also be determined by using census tract instead of county population to determine program eligibility and funding. The USDA ERS offers that “land-use and administrative concepts (have been) adopted by several USDA funding programs” (USDA 2015: n.p.). These have used census tracts to define and fund rural areas with a population under 50,000 (USDA 2008: n.p.). There are nine, urban Iowa counties, each having a

population over 50,000. Counties with fewer than 50,000 population are classified as rural. Exceptions are found on Iowa's western border, contiguous to Nebraska and South Dakota, where two metropolitan areas are located and the northeastern, metropolitan Blackhawk and Dubuque counties.

In addition to population, RUCC classifies non-metropolitan counties by distance or adjacency to metropolitan counties. RUCC uses county codes one through nine to classify counties. One through three are classified as metropolitan and four through nine are non-metropolitan. Those with a designator of one are the most populated metropolitan areas. This classification system establishes nine urban counties as centers for Iowa's nine metropolitan statistical areas (i.e., MSA). Iowa does not have an urban area with a large enough population (i.e., a population over one million) to be designated as a RUCC 1. The most populous county is Polk County, within which is the city of Des Moines. It has a RUCC 2 designation (i.e., population 250,000 to one million). It is one of nine Iowa's urban centers that have core counties assigned either a RUCC 2 or 3 (i.e., metropolitan with a population fewer than 250,000) designation. These core counties are Blackhawk, Dubuque, Johnson, Linn, Polk, Pottawattamie, Scott, Story, and Woodbury counties. RUCC 4 and 5 are classified as non-metropolitan, micropolitan counties with more than 20,000 persons and less than 50,000 persons. RUCC 2 and 3 (i.e., metropolitan urban centers) comprised nine counties and RUCC 9 (i.e., the most rural) comprised eleven counties each and RUCC 4 through 8 (non-metropolitan rural and rural) comprised eighty counties.

Studies designed to "track and explain economic and social changes" usually use "the metropolitan-non-metropolitan classification because it allows the use of widely available

county-level data” (USDA 2015: n.p.). Therefore, I followed this guidance provided by the USDA ERS by adopting the 50,000-population threshold separating urban from rural counties and used the USDA RUCC scheme to begin the county separation process.

Overview of County Type Separation

This study was able to separate counties in four county types. Iowa’s most rural and moderately rural counties are distinct from Iowa’s nine urban counties. This study classifies eleven rural counties as most rural. Rural is defined by population total and distance from an urban area. The most rural have a very small population and are far from an urban area. Moderately rural counties have greater population than the most rural and are closer to an urban county. In addition to these two rural county types, two urban county types were established: the urban and the technocratic/professional. Of the nine, Iowa, urban counties, two fit into the unique, technocratic/professional urban county type.

This unique county separation was achieved by two methods. The USDA Rural-Continuum Code separated rural and urban counties by population total and distance to an urban county. Exploratory Factor Analysis (i.e., EFA) went further and was able to establish separate urban county types. Intra-urban county separation was accomplished via two different variable clusters. The urban county type displayed a cluster of race, crime rate, religion, and political party affiliation. The other urban county type, the technocratic/professional, was characterized by a cluster of education, income, military veteran status, and age. Consequently, the EFA urban separation provided a unique, more nuanced, previously undetermined, urban/rural separation, for handgun permit study. In the exploratory

exercise, the rural county types scored differently on the urban and technocratic/professional county types', socio-demographic, variable clusters.

Accordingly, Johnson and Story counties were identified as technocratic/professional. Although urban in population, these counties are unique along four socio-demographic variables: a very high, formal education level; high median household income; and a low military veteran rate and median age. The other seven metropolitan urban counties have a higher crime rate, percentage of African Americans, Democratic political party affiliation, and Protestant denomination adherence than the technocratic/professional urban county type. Finally, in its separation of urban county types, EFA also separated each of these from the two rural county types' socio-demographics.

Dependent Variable

The dependent variable was the handgun permits to carry issuance rate in 2010, 2011, and 2013. A handgun permit to carry applicant submits the application to the county sheriff in the county in which the applicant resides. The county sheriff either approves or denies each handgun permit to carry application. The data were derived from each county sheriff's annual submission of the number of handgun permits to carry by month to the Iowa Department of Public safety. The monthly totals were totaled and an annual total for each county were used to calculate the HPIR. The HPIR was calculated per 100 persons in each county.

Independent Variables and Data Sources

The four county types were the independent variables. The county types were constructed through an analysis of the following variables: population, race, religion, political party voter registration, crime, age, median household income, military veteran status, and

education. These county data originated from: (1) the U.S. Bureau of Economic Analysis (population); (2) the U.S. Census Bureau (race, median household income, and age); (3) the 2010 U.S. Religion Census: Religious Congregations and Membership Study (religion); (4) the State of Iowa, Secretary of State, Voter Registration (political party voter registration); (5) the U.S. Federal Bureau of Investigation (crime); (6) the U.S. Department of Veterans Affairs (military veteran status); and (7) the State of Iowa, Department of Education (education).

The Handgun Permit to Carry

The Iowa handgun permit to carry is required by state law for an Iowa resident to carry a handgun in an incorporated area. These permits are not permits to specifically carry a weapon in a concealed manner. Once an individual has been approved via the permit to carry, the individual may carry the weapon concealed or out in the open. In Iowa, these permits are not permits to acquire or purchase a handgun; that is a separate permit.⁸ The permit is not used for rifle or shotgun purchases; indeed, a permit to carry is not required in Iowa for a person to buy a rifle or a shotgun.

Rejected Socio-Demographic Variables

Other socio-demographic variables were considered but not used in the final analysis due to incomplete data. Mental health service data were rejected due to some counties combining data. The data could not be separated by county. Suicide data were rejected due to some counties failure to report. Suicide remains a sensitive topic and some county officials do not report suicides to the appropriate state agency for an annual compilation.

Missing Data

The study had very little missing HPIR data. Keokuk County reported zero permits issued in 2010 and 760 in 2011. Keokuk is a moderately rural county. An average for moderately rural counties was calculated without this county. This average was used as a substitute for Keokuk county's 2010 HPIR.

Sequence of Methods

A. Sequential Overview:

1. Exploratory Factor Analysis – Explored underlying structural relations between measurable variables.
2. Scheffe Test – Tested for: (a) statistically significant differences between socio-demographic traits and counties; and (b) statistically significant differences between handgun permit to carry rates and counties.
3. Cross Sectional Regression analysis – Tested for statistically significant differences between handgun permit to carry rates and county types.
4. Cross Sectional Regression analysis – Tested for statistically significant differences between handgun permit to carry rates and county types.
5. Introduction of Covariate – The introduction of unemployment as a covariate strengthened the regression analysis model. It was not a direct, cultural variable, but an economically-based variable that could be indirectly related to some culturally-based

⁶A person may buy a handgun from a private individual, such as a friend, but Iowa Statute 724.16 requires that the seller should know if the buyer has a prohibitor, such as a felony conviction, precluding the buyer from purchasing the handgun.

6. Introduction of Covariate – The introduction of unemployment as a covariate strengthened the regression analysis model. It was not a direct, cultural variable, but an economically-based variable that could be indirectly related to some culturally-based socio-demographic, cultural variables such as age or active participation within the religion adherence variable. It tested for additional variation in handgun permit to carry rates not previously accounted for, had the potential to increase power of subsequent statistical tests, and reduce possible, unexplained error.
7. Longitudinal Regression analysis – Used to test second hypothesis that required shifting from cross sectional method to a longitudinal statistical analysis to test of rate of change
8. in handgun permit to carry rates by differences in the slope of the regression lines and via correlation coefficient review. It confirmed earlier Scheffe test findings of statistically significant handgun permit to carry rate differences by county type.

(B) Specifics

First, it was postulated that rural and urban counties, based upon nine socio-demographic trait patterns, were culturally unique. It was thought that these unique cultures would produce different handgun permit to carry rates and these unique cultures could be determined by a county type. This would be established via cross sectional methods.

SEM's exploratory factor analysis was used to explore relations between variables for county type construction. After EFA established the four county types, and exclusively in the context of cross sectional methods, the Scheffe test was used to test the theory that statistically significant differences existed between counties based upon the nine socio-demographic traits. (See table 4.1, page 123, chapter 4, for this first Scheffe test.) After

confirming this, regression analysis was used to determine if county handgun permit to carry rates were significantly different by county type for 2010 and 2013.

Unemployment was used as a covariate to strengthen my regression models; it can account for variation in the handgun permit to carry rate that may not have been accounted for by the other nine variables. As a covariate, and as a supplemental variable, unemployment had the potential to increase the power of my subsequent statistical tests. It did so, as it was a significant predictor of handgun permit to carry rates by county type. In this way, it made a better model.

At this point, the study moved from exploring the underlying structure of the nine socio-demographic variables resulting in a four county type construct via EFA; to determining statistical significance between the socio-demographic variables and the four county types via Scheffe; to a determination of statistically significant differences in handgun permit to carry rates by the four county types and the use of a covariate to account for additional variation not accounted for by the nine socio-demographic variables, and thereby reduce error (regression analysis).

Once again, the Scheffe method was used to adjust levels of significance in the regression analysis of handgun permit to carry rates by county type to account for multiple comparisons. (See table 4.4, page 130, in chapter 4.) With several socio-demographic variables to consider, the Scheffe method was more appropriate than others and offered a narrower confidence level with so many comparisons to be made. Scheffe testing has been an effective method for validating clusters and revealing significant inter-cluster differences (Al-Yagon 2012: 170). This method tested (table 4.4, page 130, in chapter 4.) hypothesis one and showed

significant differences in 2010, 2011, and 2013 handgun permit to carry rate means between county types.

The longitudinal analysis, was next. It tested hypothesis two, urbanism is negatively associated with handgun permitting. Longitudinal testing is found in tables 4.5, 4.6, 4.7, and 4.8. (See pages 131, 133, 121, and 123, in chapter 4.) Tables 4.5 and 4.7 tested the rate of change for handgun permit to carry rates by county using differences in slopes of the regression lines from 2010 to 2011 and 2011 to 2013. These tests are frequently used methods in empirical social science research. These tests were quite suitable for this study's need to test its set of predictors, the county types, which were viewed as important factors to explain handgun carrying permits as detailed in theory and a prior Scheffe test. The results show an insignificant difference in rate of change for handgun permit to carry rates by county type in both cases.

Table 4.6 used regression analysis and determined that there were significant mean differences in handgun permit to carry rate across county types in 2011 after controlling for 2010 mean level of HPIR for all county types. It also provided confirmation of Scheffe results showing significant county handgun permit rate differences in 2011. Table 4.6 also used regression analysis and determined that there were not statistically significant mean differences in handgun permit to carry rate across county types in 2013 after controlling for 2011 mean level of HPIR for all county types.

Methods/Testing Hypotheses/Method Strengths and Limitations

The first part of this section draws heavily from Byrne's (2010: 1-7) explanation and review of Structural Equation Modeling (i.e., SEM). I specify how SEM was directly applied to this study's objectives, hypotheses, while explaining various SEM terms used in the study.

It is advanced that cultural distinctiveness exists between various rural and urban cultures in Iowa, which in turn, explains handgun permit to carry activity by county type in Iowa. Structural Equation Modeling (i.e., SEM), a statistical methodology, Scheffe tests, regression analysis, and the introduction of a covariate, are used to test the two hypotheses.

The SEM structural equation process is embodied in regression equations and the structural associations between handgun permits to carry and county type can be depicted pictorially. I used structured equations in the form of models and hypothesized relationships between measurable, socio-demographic variables and argued that the results would be consistent with the original data. The findings uphold my argument as results were consistent with the data, showing relationships between the measurable variables (e.g., income, education, race), unobserved variables (i.e., SEM terms these factors and there were two, EFA-derived factors in this study: the urban and technocratic/professional county types), and handgun carry permit rates.

EFA was used to investigate potential relationships between observed, socio-demographic variables (e.g. age, population, and race) and the potentially unknown factors (i.e., urban and technocratic/professional county type). EFA allowed this study to determine to what extent the observed was linked to the unobserved factors. EFA identified four observed

related variables in two factors that accounted for covariance among the socio-demographic variables.

For instance, as higher education increased, so did median household income within the technocratic/professional county type. As one changed, the other changed in this direction in this specific county type. In turn, the variables with lesser values within the technocratic/professional county type, such as the number of military veteran status and religion, also linked together, but with low values. This is covariance. EFA could draw out the unobserved (i.e., certain county types or latent variables) by showing a structural relationship with several measurable, observed variables. The relations between the observed variables are quantified and are personified in high factor loadings. High factor loadings for observable variables within one factor (i.e., county type) corresponded with low factor loadings for the same observable variables within a different factor (i.e., another county type).

Using the USDA ERS RUCC classification system as a springboard, EFA was the second county-separating method incorporated. Factor analysis has been described as “the oldest and best-known statistical procedure for investigating relations between sets of observed and latent variables” (Byrne 2010: 5) and “the most useful for the internal structure of a set of indicators” (Pedhazur and Schmelkin 1991: 66). It explored the simplicity of explaining gun carrying activity from the rigid, all or nothing, rural-urban dichotomy.

EFA was used as a statistical method to reveal potential underlying relationships between nine, observable and measurable, socio-demographic variables or attributes of persons, aggregated at the county level. These underlying relationships, if adequate in number

and intensity, constructed distinct county types in addition to and different from the county types not identified by the USDA RUCC classification system.

The potentially more nuanced differences between counties supported the theory that the most rural Iowa counties have a unique set of socio-demographic traits that define its culture as one in which handguns thrive. EFA county type construction provided an understanding of cultural structural patterns within and between Iowa's counties. The relationships among these variables were used to show distinct county groupings. The battery of nine measurable variables formed patterns that produced latent constructs. These latent constructs or factors were county types. These factors would not have been formed without sufficient strength. The strength of the latent constructs, county types, was embodied by not just a single or two measurable variables, but several measurable variables. Indeed, one or two strong variables working together would not have been enough to form a conclusive latent factor.

The USDA RUCC one through nine classification system was limited to county population and distance from urban/metropolitan centers. It could not adequately define county culture. Therefore, I incorporated nine, observable, measurable, socio-demographic variables as cultural characteristics. These variables' frequencies were converted to rates by county. EFA was essential for me to be able to establish the four, distinct county types.

Using its factor loading process, EFA showed a separation within the urban county type. EFA findings showed that certain socio-demographic variables clustered together to form this unique county type. This additional county type was still urban by population, but unique if a comparison was done using eight other variables. EFA findings revealed cleavage within the

urban county type, creating two factors or county types. In other words, factor loadings for several certain variables were high for one type of urban county and several different variables were high for another type of urban county.

The EFA findings revealed that Johnson and Story counties comprised this distinct county type. These counties are referred to in this study as technocratic/professional counties. These were unique from other county types by having a much higher formal educational level; a higher median household income; a lower rate of military veterans; and a lower mean age than any other county type. Together, these variables clustered to form what is referred to as a high factor loading characterizing the technocratic/professional county type. The non-technocratic/professional, urban county type was characterized by a high Black race rate; a high violent crime rate; a low registered Republican voter rate; and a low Protestant religion rate than other county types. In addition to the RUCC population and distance from the urban setting dimensions, each of the EFA high loading variable clusters that described urban and T/P counties provided additional separation from rural and all other counties. The rural counties had a higher rate of Republican registered voters, Protestants, and military veteran status persons; a higher rate of older aged persons; a lower median household income rate; and a lower crime rate, persons of color rate (i.e., specifically Black race), formal education rate, and population, than the urban and T/P counties.

The EFA Process

A sample size ratio of about 10:1 with ninety-nine counties and nine socio-demo-graphic variables was used. This is a preferred minimum ratio for some social science scholars (Costello and Osborne 2005: 4; Yong and Pearce 2013: 80). In contrast, Gorsuch (2009: 184) noted that

MacCallum et al (1999: 84) “found little support for commonly suggested rules of thumb regarding sample sizes in exploratory factor analysis”. The EFA included a factor rotation analysis to potentially produce high variable loadings to determine the number of factors (i.e., county types). In essence, this process established four county types via different socio-demographic patterns. I labeled these most rural, moderately rural, urban, and technocratic/professional.

EFA produced two models, one with two factors and the other with three factors. In the two-factor model, factor 1 is the urban county type and factor 2 is the technocratic/professional county type. No collinearity was exhibited in this model, lending to valid individual predictor or variable results and clarity between variables. Therefore, there was distinctiveness between these two factors, urban and T/P county types. But, a three-factor analysis revealed only a few high factor loadings on two of three potential factors (i.e., potential county types), four crossloadings, and one instance of potential collinearity (i.e., communality). (Please refer to table A.4 in Appendix A for urban and technocratic/professional county type factor loadings.) Therefore, a three-factor structure was rejected. Yong and Pearce (2013: 88) suggest that the Kaiser Measure of Sampling Adequacy (i.e., MSA) output indicates all variables used must meet or surpass a .50 minimum cutoff point. Below this threshold was an unacceptable score. Using a two-factor structure in this study produced a parsimonious condition while meeting this standard with a Kaiser Measure of Sampling Adequacy of 0.73. Factor one, urban, had reasonably high loadings on violent/property crime, Republican, Protestant, and race-black. The technocratic/professional factor was constructed with high factor loadings for education, median household income, age, and military veteran status. The technocratic/professional

construct demonstrated high education and median household income and low age and military veteran status. This revealed a sound sampling method with distinct and reliable variables within each factor (i.e., urban and technocratic/professional). The possibility of collinearity was reduced in the regression models by separating RUCC classifications as independent variables from the Factor 1 and 2 independent variables. Independent variables used to establish potential HPIR distinctions between rural and urban counties, rural and technocratic/professional, and urban and technocratic/professional counties were race-black, military veteran, Protestant, median household income, education (Bachelor or higher), population, median age, Republican voter, and violent and property crime. Weighted sum scores were used to determine the strongest variable correlation patterns.

Oblique was selected to allow within-factor variable correlation in each of the two factors, leading to more accurate results. The data were considered strong in that there were five variables loading at about an adequate to just below a high level within each common factor, urban and technocratic/professional (Costello and Osborn 2015: 5). The communalities signify the variance in the observed variables accounted for by a shared factor. In this study, these communalities, ranged from .49 to .80, with two just above the .70 level and five close to or at the .80 level. Some researchers classify a .80 or above as a high factor loading and others (MacCallum et al. 1999: 91) consider .60 to .80 as high level. "More common" social science communalities are in the magnitude of .40 to .70 (Costello and Osborne 20: 4). High factor loadings tend to refute negative effects of small sample size and a small variable to factor ratio (MacCallum et al. 1999: 85, 95). Some researchers maintain a sample size of 50 as a minimum (Peters 2009: n.p.) and others have noted that depending upon communality, specify 100 to

250 as desirable (MacCallum, Zhang, and Hong 1999: 84). If the strength of the data is high, then a small sample is permissible (Costello and Osborne 2005: 4). This study's data are strong as political, economic, and social influences are negligible as reporting is county level and the 2011 law eliminates discretion and reduces localized criticisms of county officials. Therefore, this study's sample size is adequate at 99.

Yong and Pearce (2013: 88) suggest that multicollinearity is problematic with a factor loading of .90. No communality or factor loading was close to .90 in the two-factor construct. As an aggregate, five variables loading adequately high within a factor translate into a robust and extremely strong factor (Costello and Osborne 2005: 5). Three variables with high factor loadings suggest a rather weak factor construct. Four high factor loadings per factor is quite acceptable.

The crossloadings between factors in this two-factor construct were quite limited. Population was the only variable with a crossloading above .32 on each factor (i.e., .49 and .56). Using Costello and Osborne's (2005: 5) guidance, one of these loadings (i.e., .56) fits firmly in the adequate factor loading category. Nevertheless, a variable's complexity and essence require evaluation with crossloading (Yong and Pearce 2013: 84). This one instance of crossloading was reasonable given population's complexity and its latent nature as inherently related to the urban and technocratic/professional environments. The two-factor construct offered a clear distinction between urban and technocratic/professional environments and dichotomous relationships with rural counterparts. Nonetheless, as a precautionary measure, population was not used within the study's two factor construct, leaving four distinctly high factor loading scores for each factor. In eight of the nine variables in this factor analysis, the between-factor

differences by all variables ranged from .01 to .76 for violent/property crime to a difference of .30 to .71 for median household income. Despite the fact that consistently high communalities, no crossloadings, and numerous variables loading highly within each factor is uncommon, this study's factor structure has achieved these characteristics. Given these facts, the presence of an acceptable two factor structure existed for this study.

EFA detailed significantly different handgun permit issuance rates between the two urban county types using high factor loadings that formed distinct variable clusters. Factor rotation was applied to improve interpretation of the factor loadings for the variables and factor construction. Eigenvalues, the amount of variance explained by a factor, were used to determine and analyze factors and to condense the variance in the correlation matrix. The eigenvalue analysis could be limited to those values near, at, or above 1. (Table A.1, Eigenvalues of the Correlation Matrix, is found in Appendix A on page 182.)

Determining the proper number of factors to use is a subjective endeavor. There are several approaches that can be used. The decision may be partially a product of the eigenvalue size derived from the study's initial data run. Each eigenvalue represents the amount of variance explained by a principal latent factor. (In this study, the latent factors were the urban and the technocratic/professional county types.) The proportion of variance represents the percent variance explained in the set of variables accounted by a factor. For the first variable (i.e., population), the proportion of variance is 0.38; meaning 38% of the variance in the variables is accounted for by this variable. The smallest eigenvalue is 0.15, which is not dangerously close to 0. This indicates that at least 15% of the variance between variables is

explained by this principle variable. Eigenvalues for the first three variables are greater than 1. Small or negative eigenvalues are most commonly omitted from a solution.

The point where a line drawn through the eigenvalues changes slope was sought using the scree test. (The scree test, Figure A.2, is found in Appendix A on page 182.) The slope's most significant changes occur between variables two and three and three and four. The scree plot visually suggested either a two or three factor solution, as these explained 58% and 68% of common variance, respectively. The sharper of the two turns to the right visually appears between the third and fourth variables, but the numerical difference between variables two and three at 0.86 is far greater than the 0.18 between variables three and four. This substantial eigenvalue difference of 0.86 between variable two and three offered a credible inclination toward a two-factor analysis.

The rotated factor loadings produced the urban and technocratic and professional county-types. (The two factor variable loadings are shown in table A.2 in Appendix A on page 183 and the three factor variable loadings are displayed in table A.3 in Appendix A on page 184.) The latter was not chosen for additional reasons.

First, the factor loading of -0.92 within factor two indicated a strong possibility of colinearity. Second, population, age, race-black, and violent/property crime had loadings of 0.33 or more within two factors, indicating a high degree of crossloading within the proposed three factor structure. Next, factor one within the three-factor loading construct had only two reasonably high factor loadings: Republican voter at -0.84 and Protestant at -0.72, far less than the preferred four high variable loadings within a factor. The three-factor loading construct had just three loadings at or above .70: age at 0.70, median household income at 0.78, and

education bachelor or higher at 0.82. Some researchers maintain that a three-high factor loading construct may produce a rather weak result (Costello and Osborne 2005: 5). Others (Yong and Pearce 2013: 80) maintain that a three-high factor loading is a minimum and acceptable. Four high factor loadings are more desirable. The two-factor construct was accepted and the three-factor construct was rejected.

The Oblique Rotated Factor Pattern (Unstandardized Regression Coefficient) was reviewed to determine which variables correlate with one another. Factors loadings were grouped using .7 as a minimum threshold. These two factors were used and these county-types were labeled as urban and technocratic/professional. These were used to explain correlations between HPIR and county types. Regression analyses were conducted to determine if there were statistically significant differences in mean HPIR by county type at certain points in time and over time vis-à-vis the 2011 handgun permit law change.

Effects were determined using the unstandardized coefficients due to unstandardized units of measure between some of the variables. For instance, variables were measured by raw frequency (e.g. population); a rate per 100,000 (e.g. violent/property crime); a percentage (e.g. ethnicity); or monetary units (median household income).

The study's analysis benefited greatly using EFA. Iowa's urban areas are quite small in population compared to many states' urban populations. In addition, the population differential between Iowa's most rural counties and Iowa's urban county types is smaller than in most states. Using socio-demographic variable clusters to differentiate between counties, if significant differences in HPIR between the new factors (i.e., urban and technocratic/professional) and rural county types were observed, this would emphasize that there are many,

significant cultural differences in addition to population differences. Only through EFA did the technocratic/professional county type come to light. No other HPIR research allowing this nuanced, rural-urban comparison is to be found. EFA provided a more elaborate and comprehensive explanation for HPIR differences along rural/urban cultural lines. This would not have been possible without EFA.

EFA has been criticized for truncated or faulty data, a failure to identify causality, and having many measurable variables clustering on more than one factor. As previously stated, this study's county-level data were extremely accurate and complete. In addition, the study was not meant to explain causation, it reported trends in HPIR by and between counties at and between certain time-points and over periods of time and described variability among observed, correlated variables (e.g. income, age, race, crime) found in latent, unobserved variables (i.e., the urban and technocratic/professional county types). Third, I simplified the factors' (i.e., urban and technocratic/professional county types) structures for better interpretation by using oblique rotation. The oblique method allows measurable variables to correlate and can also effectively separate these (e.g. age, religion, income, and others) by factors (i.e., county types). The urban and technocratic/professional county types had distinct high loadings on eight variables: age, income, military veteran, political party voter registration, race, education, crime, and religion. The oblique rotation interpretation method effectively separated urban and technocratic/professional from rural county types.

The results of this study indicate that some research conclusions were possibly wrong (urban areas do not always respond the same way as rural areas to gun law change). It is questionable whether any other research has tested for the statistical significance of the HPIR

of change between two types of urban counties and two types of rural counties. Aggregated, Iowa, handgun permit to carry data have not been used to determine differential statistical significance by county type by cross sectional and longitudinal methods vis-à-vis the 2011 nondiscretionary handgun law.

SEM

SEM was used given its powerful, exploratory capacity; is well suited for inferential purposes; is “the first and best-known process for investigating correlations between groups of observed and latent variables; is able to assess or correct for measurement error, is able to incorporate unobserved and observed variables, and is alone in its capacity to model many variable relations, and can analyze multiple dependent variables at the same time and allow independent variables to become dependent variables” ((Byrne 2010: 3-4; Suhr 2006: n.p.; Shook et al. 2004: 398; Chin 1998: vii). SEM has become popular in nonexperimental research and appears to be one of several “basic tools in the research repertoire of the social scientist” (Gorsuch 2009: ix). With these attributes, the SEM methodology is able to evaluate an important aspect to Iowa’s social and cultural handgun landscape. Additional methodological features used were longitudinal and cross-sectional regression analyses.

The longitudinal method involves gathering data over an extended period of time, providing trends or patterns for study. The longitudinal method can be limited by fewer respondents over time; but did not limit this study. This study’s use of the longitudinal technique was not hampered by fewer dependent variable data since all counties but one in just one year reported handgun permit to carry numbers for all years studied. The longitudinal

method offered the best way to study changes over time to examine county types handgun trends and correlations.

Cross-sectional studies examine a sample at a single point in time. The quintessence of cross-sectional study is the U.S. Census and U.S. Department of Agriculture's use of county level data and this was used for independent variable data and for county type construction. The advantages of this cross-sectional census data are that data are gathered from a large number of people (i.e., via the U.S. Census Bureau), theoretically on the same day, and these data are comparable since they are not affected by actual changes over time.

Hypotheses and Rationale

It is anticipated that Iowa urban counties, with a cultural composition different from Iowa rural counties, will have a lower handgun permit to carry issuance rate than rural counties. This view is supported by a study's findings showing a positive correlation between a positive vote for a new right to carry law and subsequent handgun carrying behavior in Missouri in 2003 for county populations with a high percentage of military veterans and a disproportionately undereducated population (Ghent and Grant 2015: 1). Ghent and Grant (2015: 1) also conclude that results show that philosophical and moral considerations need consideration to explain a vote in favor of a nondiscretionary gun law. This supports cultural difference theory as well.

It is expected that the more rural the county, the higher the handgun permit to carry issuance rate. EFA clearly illuminated key cultural differences between urban and rural Iowa. It deconstructed the urban centers and this deconstruction further refined the definition of rurality. Once EFA deconstructed urban centers, two types of rural counties were constructed

using USDA guidelines. Urbanism became the pivot point for each hypothesis to test and explain associations and distinctions between rural and urban county types and handgun permit rates. This deconstruction allowed a full-bodied, county classification system to test theoretical assumptions of rural cultural distinctiveness based upon many socio-demographic variables that align as delineated in the literature review.

As such, the USDA ERS Rural-Urban Continuum Code was used as an excellent starting point for classifying counties as urban. This was augmented with the additional county types illuminated by EFA. The term urbanism is used in the hypotheses to represent the nine urban core counties in Iowa. These are Blackhawk, Dubuque, Johnson, Linn, Polk, Pottawattamie, Scott, Story, and Woodbury counties. This classification is consistent with the USDA ERS RUCC classification system. Based upon other researchers' findings and my research as delineated in the literature review, the following hypotheses are advanced:

H₁ Urbanism is negatively associated with handgun permitting by year.

Second, it is suggested that urban counties' rate change will be significantly different from rural counties' rate change over time. There will be no statistically significant differences in the rate of change between all county types from 2010 to 2011 or from 2011 to 2013. The law change will increase permit rates in all counties in 2011. The increase will reach a saturation point in 2011, and then, in 2012, permit rates will plummet for all county types. Permit rates will rebound in 2013 for all county types. The rural and urban Iowa cultures will respond differently to the law, evidence of Iowa's inter-cultural (i.e., rural and urban) stability.

Prior to the 2011-gun permit law, gun permit law did not appreciably diminish or control rural gun needs. But in urban areas, the liberalized 2011 permit law had the potential to open a “floodgate”, as urban residents were now unconstrained by discretionary, pre-2011 permit to carry law. Therefore, as of 2011, urban residents were able to apply for any of several reasons, including simply because legislation made it easier to do. In addition, this meant that 2012 might experience a notably lower rate than the 2011 HPIR as those persons who needed or wanted a five-year rather than an annual carry permit would apply in 2011 and saturate the gun permit market. 2012 did in fact experience a dramatically low rate and 2013 experienced a slight, across-county type rate increase. Once again, it appeared that with the advent of the 2011 law, the thought that those who wanted handgun permits in Iowa would have these would now apply to all. Those in urban areas did not have this freedom until 2011. This, along with other factors, led to a second hypothesis. Still, other factors may influence handgun permitting and these are described below.

The 2011 HPIR spike was most likely a product of the Iowa handgun permit law change, but it was possible this was not the only reason. Land use, the Iowa law, and the local economic and social environments may explain differences over time and between county types. Other social phenomena that may have influenced the Iowa legislature to enact the non-discretionary handgun permitting law need consideration, including the rise of the politically, far-right Tea Party, a property-rights movement and gender of legislators (Mixon and Gibson 2001: 1 and 2002: 265), level of urbanization (Grossman and Lee 2008: 198), fear of a spreading of crime from another state (perhaps more populated Illinois, Missouri, and Minnesota)

(Bronars and Lott 1998: 475), and Republican control of the Iowa House of Representatives and the governors' office. These may have encouraged less government control and oversight.

The 2011 Iowa handgun permit law, changing Iowa's status as a may-issue to shall-issue handgun state, was part of a nation-wide social movement partially inspired and strengthened by two, fairly recent, seminal U.S. Supreme Court (i.e., SCOTUS) decisions. SCOTUS gun-related decisions were handed down in *Heller versus the District of Columbia* (2008) and *McDonald versus Chicago* (2010). In these cases, the court decided that the individual right to bear arms was applicable to state and other U.S. held jurisdictions and territories. This required many state, county, and city governments to alter some restrictive firearm private possession laws and ordinances. As urban counties and cities made law changes to comply with this new interpretation of the applicability of the fourteenth amendment to state and local jurisdictions, no doubt many urban residents and officials kept abreast of the implications for them. With this law change, any previous inclination to carry may have motivated some to apply for the permit. After years of living with restrictive, local firearm law, an element of the institutionalized character of the urban environment, now a permit applicant could weigh the urban collective conscience, including social sanctions that may apply to the applicant. The collective, urban moral order and commonly shared beliefs and norms and solidarity could be in the midst of change. The law change and a changing social environment were possibly producing questions and debate around handgun possession among the urban population. If the Iowa urban social environment was experiencing the nation-wide, gun social movement, a disruption of previous institutional order was possible. Segments of urban Iowa were also possibly relieved and reassured by the law change. The predominantly urban, negative reaction

to handgun carrying was possibly fading. At this point, urban handgun permit seeking may not stigmatize the applicant. The behavior might now be perceived as socially acceptable rather than offensive or peculiar. An irregular pattern of individual behavior was possibly on the horizon.

This was concluded after interviewing law enforcement personnel who believed a shift in urban attitudes was occurring. These law enforcement personnel maintained that handgun-permit-seeking citizens in more populated areas were now taking a different, handgun point of view. Those persons were seeking permits simply because “I can...and it is my right”.

Despite the lack of consensus, research indicates that the change to a non-discretionary, “shall-issue” handgun permit state has shown that rural and urban responses are different from the past (Lott 2000: 145). This study tests these findings. After weighing all these factors, the following was expected:

H₂ Urbanism is negatively associated with gun permitting over time.

I examined whether Iowa’s extremely rural counties, determined by county population total and geographic distance from urban areas and county socio-demographic trait/variable patterns, had different rates of change for handgun permit to carry rates by county type. Once again, it is noted that the technocratic/professional counties are urban, but display a unique set of socio-demographic characteristics from all other counties. County separation allowed the testing of theories that local handgun behavior, partially reflected in the handgun permit to carry issuance rate, was to a degree contingent upon differences in social and cultural conditions by county type, and that one or more of these county types might have a greater influence on HPIR over time. This would possibly note a change within rural or urban cultures.

Handgun permit to carry issuance data from the Iowa Department of Public Safety was examined. The analysis restricted itself to approved handgun permits to carry for 2010, 2011, and 2013 for two reasons. First, approved handgun carry permits were used as an indicator of potential, legal handgun carrying activity in incorporated areas of the state. Unapproved carrying from handgun permit application denial would have required separation since it involves potential illegal activity. Illegal handgun activity from handgun permit application denial is a different focus for additional study. Next, a longitudinal analysis was used to study the immediate effect of the 2011 law on the 2010 permit rate. 2011 permits were valid for five years. Before 2011, permits were valid for just one year. A longitudinal analysis was also used to examine differential county responses for 2013 after 2011. 2012 was not used due to 2011 permit saturation. Gun market saturation has been recognized as limiting handgun permit to carry activity. 2013 was used to analyze rural and urban county type saturation outcome.

Contribution to the Discipline

This study had an applied and basic research orientation. There is a lack of consensus in prior research findings regarding firearm ownership/possession rates for juveniles and adults living in rural and urban areas. Some research suggests urban ownership/possession is higher than in rural areas, others suggest the opposite (Cao, Cullen, and Link 1993: 629; Sheley et al. 1994: 219; Whitehead and Langworthy 1989: 264; Atav and Spencer 2002: 555; Rountree 2000: 319).

However, there is little research addressing firearm permits or licenses to carry rate change and differences in rate of handgun permit to carry rate-change by county culture in response to a shift from a discretionary to a nondiscretionary, state-wide, handgun permit law.

Lott's (2000: 131) concludes that urban areas will respond differently to the change from a discretionary to a non-discretionary permit law and this was tested. Given that Iowa Department of Public Safety personnel control access to state-wide, HPIR data, and my request for these data has been the only request, there is no prior Iowa-based handgun permit to carry research for examination and review. This study took the lead in this area and developed a more intricate theoretical understanding of types of rural and urban cultural settings to test the handgun permitting rates and the response to the handgun law change in Iowa. Statistical analyses verified this more nuanced understanding of handgun permitting in Iowa. The findings offer gun information that can be used in gun rights and gun control research, debates, and applied in gun-related, public policy decisions.

CHAPTER FOUR: FINDINGS

Overview

Findings show the differences between rural and urban handgun permit to carry issuance rates for the years studied were statistically insignificant and the differences in the rate of change for handgun permit to carry issuance rates by rural and urban counties were both statistically significant and statistically insignificant depending upon the points in time. In 2011, the law changed. The rate of change (i.e., the test of slopes) between both 2010 and 2011 and 2011 and 2013 by county was statistically insignificant, with the two rural county types surpassing the two urban county types. A homogenous economic effect occurred comparing handgun permit rates between 2011 and 2013. The rate of change difference between the most rural and urban county types was statistically insignificant, meaning that the initial surge bottomed out and flattened soon across the state after demand was fulfilled. This feature of the rural and urban cultures remained fairly stable vis-à-vis the handgun law change as demonstrated by handgun permit issuance rates.

Table Overview

Table 4.1 shows the relationship between rural and urban county types using a Scheffe test to report 2010 socio-demographic means, standard deviations, and significant statistical differences, while Table 4.2 and 4.3 present regression analyses to show any statistically significant differences between mean handgun permit to carry rate controlling for unemployment (i.e., a supplemental, not of primary interest, variable introduced to strengthen the results and control for possible effects of unemployment) and rural and urban county types in 2010 and 2013. Results showed that county types were significant predictors of handgun

permit to carry issuance rates in 2010 and 2013. Table 4.4 used a Scheffe test to report statistically significant differences in 2010, 2011, and 2013 handgun permit to carry issuance rate means. Standard deviations between county types are also reported in this table. These findings confirmed the postulate that rural and urban cultures will have a different effect on gun activity; it also determined that the differences are more pronounced if a researcher segments rural and urban areas with more exacting procedures.

Tables 4.5, 4.6, 4.7, and 4.8 test for statistical significant differences and show the relationship between the rate of change of handgun permit to carry issuance rates and county types to test whether urban counties reduces handgun permitting over time. Tables 4.5 and 4.7 test for significant differences in the slopes of the regression lines. The slopes are represented numerically and represent the rate of change in handgun permit to carry rates from 2010 to 2011 and from 2011 to 2013, respectively, by county type. The results showed there were no statistically significant differences between county types with p-values of .323 and .265. This provides support that county types responded alike to the 2011 handgun permit to carry, discretionary to non-discretionary, law change.

The regression analyses in tables 4.6 and 4.8 augment tables 4.5 and 4.7. These show any relationship between handgun carrying rates and county types over time. The results verify Scheffe test results indicating significant distinctions between county type, mean, handgun permit to carry issuance rates. Table 4.6 tests change rate comparisons for county types for years 2010 and 2011. It shows statistically significant distinctions between the most rural and the three other county types in mean handgun permit to carry issuance rates. It showed county type was a significant predictor of 2011 handgun permit to carry issuance rates beyond

the variance already accounted for by the 2010 handgun permit to carry issuance rate. Table 4.8 tests mean HPIR differences for 2013 controlling for mean HPIR in 2011. It shows that county type was not a significant predictor of 2013 handgun permit to carry issuance rate beyond variance already accounted for by the lag variable of 2011 HPIR, except between the technocratic/professional and moderately rural county types at a p-value of .037.

A few significant findings were found in the last four tables. These were longitudinal analyses. Using the association between the socio-demographic variables and county types and the county types and handgun permit to carry rates (i.e., shown in tables 4.1, 4.2, 4.3, and 4.4), earlier findings showed that the eleven most rural counties that make up the most rural county type had an extremely distinct gun culture compared to all other county type cultures.

For instance, the four county types reacted the same to the 2011 handgun law by increasing their handgun permitting activity in 2011 and by their post-2011, 2013 response (i.e., as shown by slope similarity scores of .323 and .265 in model three in tables 4.5 and 4.7). The differences between the four county types' HPIR rate of change was statistically insignificant. However, the 2011 mean HPIR, controlling for the 2010 mean HPIR, between the most rural county type and the other three county types was always statistically significant (see table 4.6). However, the 2013 mean HPIR, controlling for the 2011 mean HPIR, between the most rural county type and the other three county types was always statistically insignificant (see table 4.6). So, the between-county rate of change by slope was similar (i.e., insignificant) for 2010 on 2011 and 2011 on 2013, but the between-county, mean HPIR was different for 2011 and 2013.

The Tables, and Interpretation

Scheffe tests were used first to show significant differences between the four county types for 2010 and ten socio-demographic variables to test the validity of the EFA results. If the EFA results could not supported, then the distinct county types were invalid. Scheffe provided a single-step, multiple comparison procedure. It applied to the estimates of all possible contrasts among the county type means, not just the pairwise differences considered by other methods (e.g. Tukey-Kramer). These results supported the study's EFA results separating Iowa into four unique county types with unique variable clusters. EFA county type separation by high factor loadings for population, age, education bachelor, race, median household income, crime, voter registration by political party, religion, and military veteran status was supported. The separations were statistically significant in thirty-five of thirty-six instances.

Table 4.1. 2010 Socio-Demographic Mean, Standard Deviation, and Significant Differences between County Types

Variable (Percent of base unless otherwise noted)	Most Rural	Moderately Rural	Urban	Technocratic/ Professional
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Population (number)	7463 ^{G3G4} (1951)	15111 ^{G3G4} (6469)	68621 ^{G1G2} (87495)	110212 ^{G1G2} (29232)
Age (number)	44 ^{G3G4} (3.3)	43 ^{G3G4} (2.8)	40 ^{G1G2G4} (2.9)	28 ^{G1G2G3} (1.8)
Bachelor or higher	16.0 ^{G3G4} (2.9)	17.3 ^{G3G4} (3.6)	21.7 ^{G1G2G4} (6.1)	49.0 ^{G1G2G3} (2.5)
Median HH Income (number)	40528 ^{G2G3} (4003)	45929 ^{G1G3} (4069)	49821 ^{G1G2} (7293)	50103 (1288)
Race Black	0.4 ^{G3G4} (0.5)	0.6 ^{G3G4} (0.5)	2.2 ^{G1G2} (2.3)	3.6 ^{G1G2} (1.7)
Violent/Property Crime (per 100000)	786 ^{G3} (627)	1331 ^{G3} (779)	2485 ^{G1G2} (1462)	2577 (324)
Military Veteran	9.5 ^{G2G4} (1.3)	8.4 ^{G1} (1.2)	8.6 ^{G4} (1.1)	6.0 ^{G1G3} (0.4)
Protestant	48 ^{G3} (13)	46 ^{G3} (13)	22 ^{G1G2} (6)	29 (12)
Republican Voter	24.6 (3.9)	24.7 ^{G3} (6.7)	20.6 ^{G2} (5.1)	16.1 (2.4)

Note: Scheffe's test, superscript, indicates significant differences at $p < .05$ between the four county types. G1 = most rural; G2 = moderately rural; G3 = urban; and G4 = technocratic/professional counties. Superscript indicates significant differences between counties.

Cross Sectional and Longitudinal Analyses

HPIR cross sectional (a point in time) and HPIR longitudinal (change over time) analyses were conducted. This was done to offset the influence the change in the time frame a permit is valid: the 2011 law made handgun permits valid for five years rather than one year. A cross sectional analysis is used for a 2010 to 2013 handgun permit rate comparison between county types. A longitudinal analysis is used to test for rate of change differences between rural and urban county types from 2010 to 2011 and 2011 to 2013. Differences or similarities in the rate of change for handgun permits between county types guide narratives that fearing more

liberalized handgun permit to carry law is reasonable or unreasonable. The results of a cross sectional analysis testing hypothesis 1 are shown in Tables 4.2, 4.3, 4.6 and 4.8. The longitudinal analysis testing hypothesis 2 are shown in Tables 4.5 and 4.7.

Unemployment as a Covariate

Unemployment was tested as a sole predictor variable for 2010 mean HPIR to see if it would be a significant covariate to include in the model. (It was used as a supplemental variable to strengthen the reliability of the socio-demographic, cultural compositional differences between rural and urban county types established by EFA. It also reinforced the findings that there were significant mean handgun permit rate differences between rural and urban county types.) This test showed unemployment is a significant predictor of 2010 mean HPIR across all county types with a .042 p-value. (See Table A.4 in Appendix A on page 184.) A subsequent model tested for the significance of county type controlling for unemployment and results showed that county type is a significant predictor of HPIR with a $\leq .001$ p-value. Once again, this indicated there were significant mean differences in HPIR among county types. A final test showed an insignificant change in R square (i.e., R^2). This tested any interaction between county type and unemployment (i.e., an observed variable) to see if there were differences in the relationship between HPIR and unemployment across county types in the model (i.e., how much of the total variation of outcomes was explained by the model). The results indicated that the relationship between 2010 HPIR and unemployment was the same regardless of county type (i.e., it remained a significant predictor of 2010 mean HPIR for all county types).

Cross Sectional Analyses

Table 4.2. Regression Analysis for 2010 Mean HPIR by Unemployment (Covariate) and County Type

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	57.821	4	14.455	9.952	.000 ^c
Residual	136.533	94	1.452		
Total	194.354	98			
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	1.519	.974		1.559	.122
Unemployment	-.237	.103	-.206	-2.315	.023
Group=1.0 (Most rural)	3.806	.939	.854	4.052	.000
Group=2.0 (Moderately Rural)	2.044	.888	.716	2.301	.024
Group=3.0 (Urban)	1.531	.905	.487	1.692	.094

a. Dependent Variable: HPIR_2010

b. Tech/Prof County Type is Baseline Group 4)

An Analysis of Variance (ANOVA) test was conducted. Table 4.2 shows that at the 0.05 level, the most rural and moderately rural mean HPIR were significantly different from Technocratic/Professional (i.e., baseline group 4) mean HPIR, after controlling for unemployment (i.e., unemployment was held constant for comparing county types). At the 0.1 level, all three groups were significantly different from technocratic/professional mean HPIR, after controlling for unemployment. Hypothesis one, urbanism is negatively associated with handgun permitting by year, was supported.

Table 4.3. Regression Analysis for 2013 Mean HPIR by Unemployment (Covariate) and County Type

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	3.028	3	1.009	4.48	.005 ^b
Residual	21.435	95	.226		
Total	24.463	98			
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	1.123	.336		3.342	.001
Group=1.0 (Most Rural)	1.106	.365	.699	3.029	.003
Group=2.0 (Moderately Rural)	.967	.342	.955	2.832	.006
Group=3.0 (Urban)	.742	.348	.665	2.131	.036

a. Dependent Variable: HPIR_2013

b. Group=4.0 is baseline technocratic/professional county type.

In table 4.3, unemployment was again tested as a sole predictor variable for 2013 mean HPIR. This test showed unemployment is not a significant predictor of 2013 mean HPIR across all county types with a .756 p-value. (See Table A.5 in Appendix A on page 185.) A subsequent model tested for the significance of county type on 2013 mean HPIR. Table 4.3 shows county type was a significant predictor of 2013 mean HPIR with a .005 p-value. There were significant mean differences in 2013 mean HPIR between county types. At the 0.05 level, all three county types were significantly different from technocratic/professional in mean HPIR. Hypothesis one, urbanism is negatively associated with handgun permitting by year, was supported.

Scheffe Test

At this point, a Scheffe test were run to show differences (i.e., in this study, the process compared county types to judge if these are identical or different by handgun permit to carry rate). This Scheffe test showed significant differences in 2010, 2011, and 2013 HPIR mean

between county types. The 2010 and 2011 separation were greater than the 2013 separation between county types. Urban (i.e., G3) HPIR separation was less significant in 2013 than in 2010 and 2011. Separating the technocratic/professional county type from the other urban counties showed a significant distinction between technocratic/professional and the most and the moderately rural county types.

Table 4.4. 2010, 2011, and 2013 HPIR Mean, Standard Deviation, and Significant Differences between County Types.

Handgun Permit Issuance Rate (Percent)	Most Rural		Moderately Rural		Urban		Technocratic/ Professional	
	Mean (SD)		Mean (SD)		Mean (SD)		Mean (SD)	
Gun Rate 2010	3.9% ^{G2G3G4}	(1.6%)	2.0% ^{G1}	(1.3%)	1.5% ^{G1}	(1.0%)	0.4% ^{G1}	(0.0%)
Gun Rate 2011	6.7% ^{G2G3G4}	(2.1%)	4.4% ^{G1}	(1.6%)	3.8% ^{G1}	(1.3%)	1.9% ^{G1}	(0.3%)
Gun Rate 2013	2.2% ^{G4}	(0.4%)	2.1% ^{G4}	(0.4%)	1.9%	(0.6%)	1.1% ^{G1G2}	(0.3%)

Note: Scheffe's test indicates significant differences at $p < .05$ between the four county types. G1 = most rural; G2 = moderately rural; G3 = urban; and G4 = technocratic/professional counties. Superscript indicates significant differences between counties.

Longitudinal Analyses

The HPIR longitudinal findings are shown in tables 4.5 through 4.8. Tables 4.5 and 4.7 tested hypothesis two, urbanism is negatively associated with gun permitting over time, while tables 4.6 and 4.8 primarily tested hypothesis one, urbanism is negatively associated with handgun permitting by year, in a longitudinal setting.

Table 4.5. 2010 to 2011 HPIR Change by County Type

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.624 ^a	.389	.383	1.41005%	.389	61.812	1
2	.662 ^b	.438	.414	1.37405%	.049	2.732	3
3	.677 ^c	.459	.417	1.37039%	.021	1.177	3
Model	Change Statistics						
				df2	Sig. F Change		
1				97	.000		
2				94	.048		
3				91	.323		

a. Predictors: (Constant), HPIR_2010

b. Predictors: (Constant), HPIR_2010, Group=2.0, Group=3.0, Group=4.0

c. Predictors: (Constant), HPIR_2010, Group=2.0, Group=3.0, Group=4.0, H2010G2, H2010G3, H2010G4

Table 4.5 considered the change in HPIR from 2010 to 2011 by county type. This was accomplished by testing for significant differences in slopes of the regression lines for 2011 HPIR regressed on lag variable 2010 HPIR. Three models were tested as each succeeding model tests the preceding model for significance. Model one showed a statistically significant linear relationship at .000 between 2010 HPIR and 2011 HPIR. Once this statistical significance was determined in model one, additional models were tested to determine if there were statistically significant differences in the: (1) starting points for 2010 HPIR by county type; and (2) rates of slope increase or decrease by county type. Model two, with an incremental p-value of .048, showed there were statistically significant differences in HPIR starting point means across county types, confirming Scheffe results as shown in table 4.4. Building on this model, model three showed the slope terms and parallelism between slopes. Results showed an incremental p-value of .323, which is far below the .05 confidence level. This indicated that there were statistically insignificant differences between the four county types' slopes of the regression lines. This means that the change rate differences between counties were

statistically insignificant from 2010 HPIR to 2011 HPIR. Hypothesis two, urbanism is negatively associated with handgun permitting over time, was rejected. Rejecting hypothesis two indicated that each county type reacted to the new 2011 handgun law similarly.

Table 4.6. Regression Analysis of Change for Mean HPIR 2011 by Unemployment and County Type with Lag Variable HPIR 2010

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	138.281	4	34.570	18.310	.000 ^c
Residual	177.474	94	1.888		
Total	315.754	98			

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	4.235	.607		6.982	.000
HPIR_2010	.632	.114	.496	5.525	.000
Group=2.0	-1.125	.499	-.309	-2.257	.026
Group=3.0	-1.426	.561	-.356	-2.540	.013
Group=4.0	-2.578	1.127	-.203	-2.286	.024

a. Dependent Variable: HPIR_2011, baseline = Most Rural (Group 1)

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	3.110	.292		10.648	.000
HPIR_2010	.632	.114	.496	5.525	.000
Group=1.0	1.125	.499	.198	2.257	.026
Group=3.0	-.300	.325	-.075	-.925	.357
Group=4.0	-1.452	1.005	-.114	-1.446	.152

a. Dependent Variable: HPIR_2011, baseline = Moderately Rural (Group 2)

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.810	.315		8.910	.000
HPIR_2010	.632	.114	.496	5.525	.000
Group=1.0	1.426	.561	.251	2.540	.013
Group=2.0	.300	.325	.083	.925	.357
Group=4.0	-1.152	1.014	-.091	-1.136	.259

a. Dependent Variable: HPIR_2011, baseline = Urban (Group 3)

The coefficients tables from model two in Table 4.6 showed that Moderately Rural, Urban, and Tech/Prof county types all differed significantly in mean 2011 HPIR from Most Rural after controlling for 2010 mean level of HPIR across all county types. This supported the earlier Scheffe test results. This also further supports hypothesis one. Accepting hypothesis one indicated that differences between rural and urban mean HPIR were statistically significant. Unemployment does not significant predict 2011 HPIR beyond the variance already accounted for by 2010 HPIR.

Table 4.7. 2011 to 2013 HPIR Change by County Type

Model	R	R Square	Adjusted Std. Error of the R Square Estimate	Change Statistics		
				R Square Change	F Change	df1
1	.441 ^a	.195	.186	0.45067%	.195	23.446
2	.496 ^b	.246	.214	0.44308%	.051	2.119
3	.527 ^c	.278	.223	0.44053%	.032	1.344
Change Statistics						
Model	df2			Sig. F Change		
1	97			.000		
2	94			.103		
3	91			.265		

a. Predictors: (Model 1), HPIR_2011

b. Predictors: (Model 2), HPIR_2011, Group=2.0, Group=3.0, Group=4.0

c. Predictors: (Model 3), HPIR_2011, Group=2.0, Group=3.0, Group=4.0, H2011G2, H2011G3, H2011G4

Table 4.7 tested for differences between county types in the rate of change in HPIR from 2011 to 2013. As previously done for 2010 to 2011, this was accomplished by testing for significant differences in slopes of the regression lines for 2013 HPIR regressed on lag (i.e., predictor) variable 2011 HPIR. Three models were tested as each succeeding model tests the preceding model for significance. Model one showed a statistically significant linear relationship between 2011 HPIR and 2013 HPIR. Unemployment did not significantly predict 2013 HPIR beyond the variance already accounted for by the lag variables of 2011 HPIR, so was not included in further

analysis. Once this statistical significance was determined in model one, additional models were tested to determine if there were statistically significant differences in the: (1) starting points for 2011 HPIR by county type; and (2) rates of slope increase or decrease by county type. Model two, with a result of .103, shows that county type was not a highly significant predictor of 2013 HPIR beyond variance already accounted for by 2011 HPIR (i.e., differences in average 2013 HPIR are not significant by county type). Building on these two models, model three results showed an incremental p-value of .265, which is far below the .05 confidence level. This indicated that there were statistically insignificant differences between the four county types slopes of the regression lines. This meant that the change rate differences between county types were statistically insignificant from 2011 HPIR to 2013 HPIR. Hypothesis two, urbanism is negatively associated with handgun permitting over time, was rejected. Rejecting hypothesis two indicated that each county type reacted to the new 2011 handgun law similarly over time.

Table 4.8. Regression Analysis of Change for Mean HPIR 2013 by County Type with Lag Variable HPIR 2011

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	6.009	4	1.502	7.652	.000 ^c
Residual	18.454	94	.196		
Total	24.463	98			
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	1.476	.235		6.286	.000
HPIR_2011	.113	.029	.405	3.897	.000
Group=2.0	.120	.160	.118	.749	.456
Group=3.0	-.035	.180	-.031	-.194	.847
Group=4.0	-.571	.367	-.161	-1.553	.124

a. Dependent Variable: HPIR_2013, baseline = Most Rural (Group 1)

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	1.596	.139		11.462	.000
HPIR_2011	.113	.029	.405	3.897	.000
Group=1.0	-.120	.160	-.076	-.749	.456
Group=3.0	-.155	.105	-.139	-1.480	.142
Group=4.0	-.690	.326	-.195	-2.115	.037

a. Dependent Variable: HPIR_2013, baseline = Moderately Rural (Group 2)

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	1.441	.138		10.437	.000
HPIR_2011	.113	.029	.405	3.897	.000
Group=1.0	.035	.180	.022	.194	.847
Group=2.0	.155	.105	.153	1.480	.142
Group=4.0	-.536	.329	-.152	-1.628	.107

a. Dependent Variable: HPIR_2013, baseline = Urban (Group 3)

The coefficients tables in Table 4.8 showed that only moderately rural and technocratic/professional county types' (i.e., groups 2 and 4 with p-value .037) mean HPIR differences for handgun permit to carry were significantly different from one another in 2013, after controlling for 2011 levels of HPIR. This partially coincided with results of a Scheffe test, which showed significant differences in 2013 HPIR between Most Rural and T/P and between Moderately Rural and T/P; but Scheffe did not control for mean 2011 HPIR. Hypothesis one, urbanism is negatively associated with handgun permitting by year, was rejected for 2013. Rejecting hypothesis one means the difference between county types' responses to the 2011 law change was statistically insignificant over time.

CHAPTER FIVE: DISCUSSION AND IMPLICATIONS

This study tested two hypotheses:

H₁ Urbanism is negatively associated with gun permitting by year.

H₂ Urbanism is negatively associated with gun permitting over time.

These hypotheses were quantitatively tested using regression analysis, Scheffe tests, and Structural Equation Modeling methods. Hypothesis one was supported by these methods and hypothesis two was rejected in all instances. The USDA RUCC classification approach provided initial county separation by population and distance from urban centers. A data-driven analysis was provided by EFA. This provided additional county type separation via socio-demographic variables clusters. This placed urbanism on a continuous scale. The variable clusters created the continuous latent factors (i.e., F1 as urban and F2 as technocratic/professional). HPIR mean differences were noted between county types.

Scheffe tests in tables 4.1 and 4.4 were completed first to ensure that statistically significant differences in fact existed between county types and socio-demographic patterns and county types and handgun permit to carry issuance rates in 2010, 2011, and 2013. These Scheffe tests supported this contention. Then, hypothesis one, urbanism is negatively associated with gun permitting by year, was tested using regression analysis. Tables 4.2 and 4.3 each showed that county type was a significant predictor of the differences in mean HPIR in 2010 and 2013. It also showed county types low on the F1 and F2 socio-demographic variable clusters were high on mean HPIR.

Hypothesis two, urbanism is negatively associated with gun permitting over time, was tested using regression analysis. A regression analysis using county type slope comparison in

table 4.7 showed a statistically insignificant difference in the rate of change in mean HPIR by county type from 2010 and 2011. The slope difference by county type from 2010 to 2011 was insignificant. The increase in mean HPIR from 2010 to 2011 was not dependent on urban or technocratic/professional county types. Therefore, hypothesis two was rejected. Table 4.8 confirmed the Scheffe tests that showed technocratic/professional, urban, and moderately urban county types mean HPIR differed from the most rural county type mean HPIR. Therefore, results supported hypothesis one. Table 4.7 also used quantified slope comparisons and table 4.8 used a regression analysis to evaluate the rate of change in mean HPIR by county type, 2011 to 2013. Each showed an insignificant difference in the rate of change in mean HPIR by the two urban county types, urban and technocratic/professional, and the most rural county type, from 2011 to 2013. The difference in handgun permitting rate of change from 2011 to 2013 was statistically significant between the moderately rural and technocratic/professional county types. Hypothesis two, urbanism is negatively associated with handgun permitting over time, was rejected.

Comparison of This Study's Findings with Previous Research Findings

One of this study's findings were in conflict with one of Lott's (2000: 131) findings. Lott expected urban areas to increase their gun permit acquisition activity much more than rural areas with a non-discretionary gun law in place. Instead, the urban and T/P county types' HPIR decreased significantly from 2011 to 2013; decreasing at approximately the same rate as the two rural county types' HPIR (Refer to .265 in table 4.7.) Additionally, in Iowa, the HPIR differences between the most rural county type and the technocratic/professional county types remained

statistically significant in 2013. Additionally, the handgun permit rate of change differences between the urban county types and the most rural county type were statistically insignificant from 2010 HPIR to 2011 HPIR and from 2011 to 2013 (Refer to .323 in table 4.5 and .265 in table 4.7.) This speaks to the importance of the distinction between the urban and t/p county types. This means that urban and technocratic/professional county types' rate of change were close enough to the most rural county type's change rate to not be statistically notable. In raw frequency, the two urban settings' mean HPIR did increase from 2010 to 2011, but remained much lower than the most rural county type's handgun permit total for both years. Within county type increases were different, though. The increases in the two urban settings were much larger than the increases in the most rural county type. The technocratic/professional county type's mean HPIR was .43 in 2010 and 1.93 in 2011. The urban county type's mean 2010 and 2011 handgun permit rate means were .84 and 2.52, respectively. The most rural county type's 2010 and 2011 handgun permit rate means were 3.88 and 6.68, respectively. For 2011 and 2013, the mean HPIR decrease for the most rural county type was from 6.68 to 2.23; for the urban county type the decrease was from 2.52 to 1.54; and for the technocratic/professional it was from 1.93 to .97, respectively. Still, the difference between the most rural and the urban and the technocratic/professional county types' rate of change was statistically insignificant for each timeframe studied.

Altering the supply and demand dynamics in the urban economic environment by instituting a nondiscretionary handgun permit law may or may not

have had as great an influence in urban Iowa as it did in rural Iowa, as perhaps Lott maintained it would. Using two measures, handgun carrying permit rates (including the fulfilled saturation point reached in 2011) and its rate of change over time, it can be concluded that there is some evidence that supply and demand, and the “rush to market” effect were “in play” in Iowa in 2011. Lott’s position that urban areas will significantly increase their handgun carrying permit activities in comparison to the most rural areas in response to enactment of non-discretionary, handgun law cannot be rejected in whole. However, it appears that the entire state, regardless of county type, or county-type culture, or political, economic, or social influences, responded in like-form, at separate rates, but with similar trajectories over time. Nevertheless, this homogeneous response does not mitigate the county types’ differences in gun activity.

Iowa Handgun Law and Implications

Findings support the position that Iowa handgun public policy reflects the interests of persons living mostly in rural counties and less so in urban and technocratic/professional counties. The findings support a distinction between rural and urban inhabitant handgun viewpoints supported by cultural difference theory. The findings indicate that not just a generalized urban cultural setting, but a more refined understanding of the urban cultural setting exists for handgun permitting activity. Iowa’s urban setting is segmented into two distinct county types: one urban and the other distinctly technocratic/professional. The study’s handgun permit to carry rate (i.e., HPIR) findings support the view that current Iowa handgun

carrying public policy is more apt to service rural inhabitants and fails to serve or consider urban and technocratic/professional county type inhabitants' preferences.

Iowa's statutory handgun regulations are numerous, some are unique to Iowa, and some can be misunderstood. A review requires measured and careful examination. In Iowa, legal carrying includes possession and ownership and is stipulated in section 724.15(1) of the Iowa Code. Section 724.15(1) of the Iowa Code instructs that ownership requires an annually approved permit to acquire a handgun (i.e., pistol or revolver) unless a five-year permit to carry has been secured. Section 724.11 of the Iowa Code contains the requirements for a valid permit to carry a handgun. Section 724.12 advises that a permit to carry a handgun may not be transferred to another person. 2011 Iowa handgun law change eliminated the discretionary power of the local permit-to-carry issuing authority. The permit to carry is provided without prior, state-required, live handgun training. Prior to the 2011 law change, live, hands-on, handgun-use training was required. Prior to the issuance of the permit, the weapon was fired by the applicant; now, live-fire is not required. lowaconcealed.com has an interesting offer for those who want to qualify quickly:

"Protecting your loved ones has never been easier. Our online certification process is quick and simple. Certification isn't just a piece of paper; it's knowing that you can be there to defend yourself and to protect your friends and your family when they need you the most. With our free online test, you can be certified in less than 1 hour. Take the first step in providing your family with the security they deserve. It takes less time than watching your favorite movie and will provide a lifetime of protection. We understand there are many different reasons people choose to carry. We value your right to arm yourself with the skills you need to live a more confident, carefree life. Take the free test today and take the first step to peace of mind. There's never been a better time to get your Permit to Carry in Iowa." (Iowa Concealed 2016: n.p.)

Additional firearm information may be found in the Code of Iowa, Criminal Law and Procedure, Weapons, Section 724.

The reader is cautioned that the handgun permit to carry issuance rate (HPIR) for a county is not a proxy for handgun ownership rate. This study's conclusion keeps this in mind. It is more accurately a measure of a more spirited and aggressive handgun activity that requires active participation as a permit applicant follows several steps within the legal process. It infers substantial forethought and intentionality in follow-up thought and behavior. It is a pronouncement to self and others in the public milieu that the handgun possessor's assemble is complete with the means and the ready availability of an extraordinarily efficient, easily hidden and manipulated, lethal instrument. This behavior infers an intent to use as necessary. This may include the taking of others' lives.

The handgun permit to carry is a step beyond the handgun permit to acquire ownership of a handgun. These are separate permits. If one does not want to carry a handgun beyond one's property into an incorporated area, then the handgun permit to carry is unnecessary. Each requires a background check. The handgun permit to carry is not exclusively for concealed carry. It allows one to carry concealed or unconcealed, in one's hand prepared for additional activities or simply as a display item, or secluded anywhere on one's person. Most activities associated with carrying in Iowa are benign. In 2014, Iowa's gun death rate was lower than all but eight states. But in Iowa's urban centers, the presence of handguns constitutes a challenge for the community, its civic leaders, and its citizens. Indeed, the Small Arms Survey noted that "large-scale and uncontrolled urbanization is often accompanied by decreasing levels of public safety and appears to be associated with increased rates of armed violence. The drug trade, the

availability of weapons, opportunities for criminal gain, and the social dislocation and anonymity of large cities all contribute to armed violence (Small Arms Survey 2007: 1). A high HPIR may be an indicator of why this is a challenge.

This more spirited activity, as measured by a consistently increasing Iowa HPIR, has revealed a change in attitude toward handgun possession and ownership use over recent years. In 2011, a change in Iowa handgun law liberalized handgun permit issuance guidelines. This, along with the 2013 HPIR, are indicators of a change in the carrying viewpoint. With respect to those interested in these activities, in 2010, there was enough political wherewithal to influence the legislative segment of Iowa's political community to legislate handgun permit issuance law change. The law moved Iowa from a may-issue to a shall-issue gun state, from a discretionary to a non-discretionary law, consistent with an approximate, thirty years, nationwide gun rights movement. In 1986, just eight states were shall-issue; twenty-five were may-issue, and sixteen were no-issue states. Just a few states remain may-issue states, requiring individuals to show good cause to own, possess, or carry a handgun to the issuing authority. In others, there are essentially no gun restrictions. States fitting this category are South Dakota, North Dakota, Maine, Wyoming, Kansas, Arkansas, Arizona, Idaho, and Alaska (Law Center 2016: n.p.). This no gun restriction circumstance is sometimes referred to as Vermont or constitutional carry. In Iowa's case, the 2011 law placed the onus on the state of Iowa to show cause to deny a permit.

Iowa's HPIR, the Weaponization of America, and the Urban Setting

This study focused on handgun permit rates in 2010, 2011, and 2013 and rate changes between 2010 and 2011 and 2011 and 2013 by county type. Beyond this timeframe, a gradual but steady increase in Iowa HPIR was occurring from 1996 to 2010. The robust increase in 2011 HPIR across the state was certainly a partial result of the permit expiring after five years rather than just one year. Prior to 2011 a permit was valid for just one year. The data and findings show that the 2013 HPIR increased after a downturn in 2012, after the 2011 law. With the 2013 uptick, it is advanced that this, along with the steady increase from 1996 to 2010, are indicators of a weaponization of many private citizens in twenty-first century Iowa.

The use of the HPIR as a measuring tool, and interpreting the handgun carrying behavior as a more assertive and spirited use of the handgun, termed eccentric by some, is consistent with the movement from may-issue to shall-issue gun permit issuance status. The 2011 Iowa law change, bringing it into line with most of the rest of America, supports a contention much of the America, albeit a minority, is weaponizing itself in a more actionable manner.

In Iowa alone, it is estimated that Iowans owned about 432,000 guns in 2009, many of which were handguns. In 2011, Iowans submitted over 101,000 applications to carry a handgun (Iowa Department of Public Safety 2013: n.p.). It is this weaponization that is of concern for some of the population as it has differential effects on different populations and social settings. In Iowa's relatively small urban centers, it can be viewed as particularly troublesome.

Iowa's urban areas, with greater population and population density, can experience frequent conflict and handgun use in violent crimes against persons and property crime. Leicht (2016: 216) noted that with "land scarcity...people have to put up with each other". This study

has confirmed that these areas have generally higher violent and property crime rates. Some research findings show “that guns are more likely to increase the risk of serious injury and death than to act as a deterrent” (Felson, Berg, and Rogers 2014: 80), and have noted positive associations between firearm household presence and rates of homicide and the “kill(ing) of innocent victims than criminals” (Hemenway 2004: 80). And, even with a lower HPIR, urban areas have handguns frequently stolen, in addition to street and bar shootings, homicides and suicides.⁷ Let’s examine how firearm possession and destructive behavior affects communities.

Firearm violence accounted for about seventy percent of all homicides (Planty and Truman 2013: n.p.). Homicide by firearm unduly affects persons ten to twenty-four years of age, victimizing this age group more than others as the second leading cause of death in 2014 (U.S. Centers for Disease Control 2016: n.p.). The CDC maintains that for those twenty-five to thirty-four years of age, it is the third leading cause of death. These high rankings may be lower than what they could be, along with lower homicide numbers for all socio-demographic groups and by “geographic area”, due to underreporting and “lack of participation”; different reporting sources or “channels”; and different homicide classifications (Rokaw, Mercy, and Smith 1990: 447, 449). Rokaw, Mercy and Smith (1990: 447) note there are “two independent systems providing national data on homicide”, the U.S. Federal Bureau of Investigation and the National

⁷I interviewed a City of Cedar Rapids, Iowa, police department Criminalist, by telephone, in October, 2015. She indicated that there were 20 handgun-stolen-from-unlocked-vehicle incidents in the city in the last six months. In 19 of 20 cases, the handguns were unrecovered. In all 20 cases, the owners of the handguns had a permit to carry a handgun. In a county-level, NIBRS, handgun study, Stalzenber and D’Alessio (2000: 1461) concluded: “The strong and consistent effect of illegal rather than legal gun availability on violent crime has important policy implications, because it suggests that greater attention should be directed at devising ways for legitimate gun owners to better secure their weapons.”

Center for Health Statistics (i.e., NCHS). The NCHS system reported “nine percent more homicides nationally” and the FBI system over a seven-year period (Rokaw, Mercy, and Smith 1990: 447). These findings were reinforced by GunPolicy.org (2016: n.p.), which advanced that if U.S. FBI data were used to calculate homicide rate by firearm, inaccurate reporting was possible. Rokaw, Mercy, and Smith (1990: 447) instruct this may constrain researchers and policy makers in determining homicide impact, societal response, and preventive practices.

A disproportionate amount of serious criminal activity positively associates with these age groups. The U.S. Federal Bureau of Investigation’s Crime Index, Part One crimes show that a majority of several serious crimes are committed by persons fourteen to thirty-four years of age. In addition, firearm possession has a high association with high risk youth behavior, including alcohol, tobacco, and other drug use; feeling unsafe and being threatened; a history of sexual assault victimization; general violence victimization; witnessing violence; poor mental health; with a somewhat lower but positive association with suicide ideation including considering suicide, making a plan to commit suicide, and actually attempting suicide; feeling hopeless; and recently having been in a vehicle with an intoxicated driver increasing the risk of unintentional injury (Ruggles and Rajan 2014: n.p.; Leeb et al. 2007: 551).

Perceptions of potential, violent, gun activity may produce deleterious effects. In a study within an urban setting, “students substantially overestimated the percentage of their peers who carried guns; the likelihood that a respondent carried a gun was strongly associated with their perceptions of the level of peer gun carrying; and most respondents believed it was easier for other youth to obtain guns than it was for them” (Hemenway et al. 2011: 997). It is not uncommon for youths to over-estimate rates of risky behavior, and specifically, gun ownership

levels among their peers (Sorenson and Vittes 2004: 858). These perceptions may increase gun carrying activity, consistent with the possibility that the occurrence of a certain behavior may lead to similar behavior occurring, termed “replicative externalities” and consistent with a contagion model for behavior explanation (Hemenway 1986: 23; Hemenway 2011: 997).

Research has shown that youths are more likely to carry guns than get into fights; to die in violent conflicts; report carrying for self-protection; report being influenced to carry by others’ carrying activity; to suffer “injury-related health outcomes when “fighting and weapon carrying” (Pickett et al. 2005: 863); when engaged in “retaliatory gang violence generating additional violence and contributing to the growth of gangs” (Decker 1996: 243); and possibly being more fearful for their safety due to their over-estimation of peers’ gun carrying activities (Hemenway 2011: 997). Other studies have found that gun carrying by adolescents correlates with a high percentage of inner-city youths, who also report carrying beyond school campuses; knowing more victims of violence; having been threatened with a gun; having been victimized by a gun; having peers, acquaintances, and relatives who carry guns; starting physical altercations; arrest records; other criminal activities; and were more likely to engage in other risky behaviors (Sheley 1992: 677; Spano 2013: 191; Hemenway 2011: 999).

Handguns and some gang activity appear to be positively associated. Many urban areas have experienced a tremendous amount of gang growth and violence in the last twenty years (Vasquez, Lickel, and Hennigan 2010: 130). As of 2014, the Des Moines Police Department claimed there were 30 gangs in Des Moines. The Federal Bureau of Investigation recognizes 115 street gangs in Iowa, including the Vice Lords, Cripps, Bloods, C Block, the Heavyhitters, the Gangster Disciples, MS13, 18th Street, and Aryan Brotherhood (Des Moines Cityview 2014: n.p.).

These are predominantly male and African-American and Latino gangs. Nationwide, gangs make up about 48 percent of all violent crime according to the Federal Bureau of Investigation (Des Moines Cityview 2014: n.p.). Gangs exist and flourish in Waterloo, Dubuque, Sioux City, Davenport, Council Bluffs, and Cedar Rapids as well. Smaller Iowa cities are not immune to gang activity, including Muscatine, Ft. Dodge, Clinton, Marshalltown, Storm Lake, and Keokuk, Iowa. Some gangs are created in Iowa; others have migrated from bigger cities such as Chicago and Los Angeles. Handgun carrying and shootings include gang shootings figure prominently in these cities' violence crime rates. Gangs and firearms influence the "nature and frequency" of violence, to include their "instrumentality effect" or lethality compared to other weapons (Felson, Berg, and Rogers 2014: 80).

The International Crime Victimization Survey found "respondents were more likely to be victims of gun violence if they lived in cities with high levels of gun availability" (Alzheimer 2008: 9). Urban gangs, handgun availability, and violence may intersect and augment victimization by handgun. The presence of urban gangs and non-discretionary handgun legislation, including permitting law, may correlate with handgun, or firearm in general, possession and violent crime. These phenomena may affect certain groups of persons differentially.

In Iowa, as elsewhere in the U.S., African-Americans tend to live in urban areas. This group has a higher rate of armed assault victimization than whites (Felson, Berg, and Rogers 2014: 81). In 2001, forty-seven percent of murder victims were African-American (U.S. Department of Justice 2002: n.p.). An estimated 466,110 nonfatal firearm victimizations occurred in 2014, compared to 332,950 in 2013 (U.S. Department of Justice 2015: n.p.).

In a Department of Justice (i.e., DOJ) 2013 and 2014 comparison, “prevalence crime rate” victimization was consistently higher for African-Americans than whites. In 2014, African-Americans suffered a 1.4 percent violent crime victimization rate, while whites endured a smaller 1.1 percent victimization rate (U.S. Department of Justice 2015: n.p.). From 2013 to 2014, the number of white, violent crime victims decreased, but increased for African-Americans (U.S. Department of Justice 2015: n.p.). The DOJ “prevalence crime rate” uses the number of victims in a given population. The DOJ has used another measurement, the “victimization rate”; this is the number of incidents in a given population. This measurement counts criminal incidents separately, eliminating duplication by individuals. Using the DOJ “victimization rate”, in 2014, whites had a 20.2 rate and African-Americans had a 22.5 rate (i.e., per 1,000). For 2013, whites were at 22.2 and African-Americans at 25.1 (U.S. Department of Justice 2015: n.p.).

Iowa’s urban county types are dynamic environments. These environments include large, stigmatized and isolated populations immersed in deeply engrained, socially structured, political and economic inequality. The inequality may not be as advanced and disruptive in Iowa’s urban counties compared to larger urban areas outside Iowa, but it exists (Stover-Wright 2014: n.p.). At least one study found its existence is reinforced by different explanations for inequality by race. In that study, white respondents maintained more often that African-American respondents that African-Americans were “under motivated”, have “as good a chance as whites to get any job for which they are qualified”, and should “try harder” to alleviate inequality (Krysan 2002: n.p.).

Urban Iowa has a greater percentage of African-Americans than rural Iowa. African-Americans in this environment commonly may find themselves in a disadvantaged condition and may also find a reduced amount of resources compared to whites, to include “homeownership, median income, college education, and professional workers”, that creates a “collective efficacy” that is more influential than disadvantage itself, and correlate with differential rates of “homicide offending” between African-Americans and whites (Velez et al. 2003: 645, 646, 648). Others conclude African-Americans in urban areas are situated in areas in which deleterious community and neighborhood structural disadvantage and characteristics, including residential patterns enhancing separation and isolation, inferior jobs, and lower incomes, lead to social disorganization, family disruption, and crime (Peterson and Krivo 2005: 333; McNulty and Bellair 2003: 1; Krysan 2002: n.p.; Sampson 1987: 378). These physically bound pockets include a structure characterized with socially harmful, marginalizing and disenfranchising, patterned phenomena that beget negative and chronic conditions with recalcitrant, destructive influences on some community members’ health, safety, life expectancy, and access and opportunity to economic success. These locales contain little social capital and social bonds and notable occupation segregation and concentration; and these areas correlate with neighborhood and community violence and delinquency (De Coster, Heimer, and Wittrock 2006: 723). These are advanced as an explanation for a higher African-American crime rate. As a result, most commonly turning firearms on themselves, African-Americans living in Iowa’s urban areas are disproportionately victimized by guns.

This study shows, in general, urban Iowa has a higher violent and property crime rate than rural Iowa. Adolescents and younger adults can be particularly adversely affected by

crime. Research findings show that as firearms and other weapons become more easily accessible in disenfranchised urban neighborhoods the potential for youths to introduce themselves into violent circumstances, whether for experimentation or for practical survival and defensive reasons, increases (Anderson 1999: 119). Sampson, Raudenbush, and Earls (1997: 922) note the positive correlation between poverty and residential instability, social structural factors, and “collective efficacy” in African-American urban neighborhoods, and in turn, between collective efficacy and violence crime, indicating that “concentrated disadvantage...is the driving structural force at play”. De Coster, Heimer, and Whittrock (2006: 753) have noted that exposure to the urban street environment and its violence is strong enough to offset the positives associated with family concerns and nurturance. Community resources and community social capital, the connections between families and/or individuals within a neighborhood or community, may arbitrate status traits on violence. But these can be in short supply in the densely populated, isolation-producing, residentially-constraining, socially stratified and segregated, disadvantaged neighborhoods or communities within the urban Iowa landscape resulting in “aspects of both community social capital and exposure to some elements of a criminogenic street milieu influencing the likelihood of youth violence” (De Coster, Heimer, Whittrock 2006: 740).

The uniquely urban center’s dynamic nature has an invigorating effect, with greater vigilance, a need for an “on-guard” mind-set in many urban neighborhoods, a higher crime rate and other debilitating and destructive influences that provide additional challenges to one’s general well-being, life chances, and access to life-sustaining, legal resources. In this context, America’s urban condition is challenged more and more by destructive firearm use.

Recent initial and follow-up, daily newscasts headline a variety of shootings of buildings, vehicles, and persons in Iowa's urban areas. Community members forming discussion groups, public officials, and law enforcement interviewed by the media appear perplexed and distraught as they search for answers to destructive handgun and other firearm use. It is in this context that one of urban Iowa's challenges is the control of violent crime, including criminal activity perpetrated with a firearm, and more specifically, the handgun.

In summary, several factors work together to create a more tenuous and destabilized Iowa urban environment. More generous Iowa handgun law is troublesome as disadvantaged urban neighborhoods and areas tend to have higher rates of crime and violence than some rural areas (U.S. Department of Justice 2014: n.p.). As the urban social structure accentuates inequalities of wealth, power, and resources in society, these combine to shape a range of social problems. As HPIR increases, Iowa's urban counties may be positioned for continued, and more pronounced, criminal and accidental handgun use. When applied to the urban setting, liberal Iowa handgun law inadequately supports aspects of a law-abiding condition, providing opportunities for illegal handgun possession and use.

Review of Iowa and Other States' Handgun Law

Urban and technocratic/professional county types have a lower HPIR than rural counties. If HPIR represents a primal handgun activity, it includes active handgun ownership and possession. The inclination for some to not be involved in this very active handgun thought pattern and activity produces questions about the functionality and wisdom of state-wide legislation liberalizing handgun law, including the 2011 handgun law. In addition, generally higher violent crime rates, whether slightly or inordinately higher, within urban or technocratic/

professional county types, lead to the same conclusion. It appears that different handgun guidelines for different localities, as determined by the views of the local inhabitants, may be germane and justifiable. But Iowa statute and the Iowa State Attorney General's office seem to disagree whether local jurisdictions can limit firearm activities.

In accordance with fairly recent U.S. Supreme Court firearm possession rulings, Iowa and its neighboring states have enacted law to abide by these supporting an individual right to bear arms. In turn, Iowa state law has been passed to limit local jurisdiction gun law. Code of Iowa statute 724.28 dictates:

“A political subdivision of the state shall not enact an ordinance regulating the ownership, possession, legal transfer, lawful transportation, registration, or licensing of firearms when the ownership, possession, transfer, or transportation is otherwise lawful under the laws of this state” (Code of Iowa 2016: n.p.).

The Iowa Attorney General, responding to a legislator's query concerning 724.28 applicability to the city of West Burlington, Iowa's ordinance restricting firearm possession in a city owned building, issued Opinion No. 03-4-1, which stated:

“...the statute does not interfere with the authority of a city to exercise its home rule power to place restrictions upon the possession of weapons which apply only to buildings owned or directly controlled by the city.” (State of Iowa, Office of the Attorney General 2003)

Local handgun ordinance and law would not be new to American cities. Some cities have developed ordinances requiring additional gun-related fees and additional limitations. But this creativity has its limitations and is frequently contested in court. Some cities enact ordinances that don't restrict handguns, but may attempt to limit criminal handgun use. For example, Cedar Rapids, requires some business types to operate cameras. The fact that such

ordinances are not new attestations to a preferred, non-firearm, urban lifestyle and a response to an unstable condition.

Local city governments in neighboring states have amended their handgun laws to align with judicial decisions while imposing restrictions. Chicago and some of its suburbs have magazine capacity limits for both pistols and long guns, including Chicago and Aurora (15 rounds) and Oak Park and Cook County (10 rounds). Not only does Iowa fail to limit magazine capacity limits, Iowa fails to regulate assault weapons, a class of semi-automatic firearm, designed to kill numerous human beings quickly and efficiently; nor does it regulate large capacity ammunition magazines. Large capacity magazines can hold up to 100 rounds of ammunition. Any firearm magazine that can hold more than ten rounds is considered by most states as a large capacity magazine. Colorado and New Jersey are the only states that disagree with this standard; each considers a fifteen-round magazine as large. As of 2008, semi-automatic pistols, which can accept the semi-automatic, larger capacity magazines, account for over seventy-six percent of all handguns manufactured in the U.S. (Law Center to Prevent Gun Violence 2015: n.p.). Iowa's gun laws fall short in other areas.

Iowa does not prohibit the possession or transfer of assault weapons or large capacity ammunition magazines, 50 caliber rifles, or require a person to report a loss or theft of a firearm. Iowa law does not prohibit those ineligible to possess firearms from possessing ammunition. Those in this category may sell firearm ammunition. There are no legal prohibitors to purchase ammunition in Iowa other than age. Recent figures show it exports more guns than it imports from other states (Law Center to Prevent Gun Violence 2015: n.p.). Iowa has no ballistic identification laws and no laws "regulating retention of gun sales or

background check records” (Law Center to Prevent Gun Violence 2015: n.p.). If it did, Iowa criminalists could establish association between cartridge cases at crime scenes to a specific firearm (Braga and Pierce 2004: 706).

A ballistic identification system requires handgun manufacturers to test-fire and archive image markings found on cartridge cases for law enforcement retrieval. Technologically advanced systems include microstamping, which uses lasers for engravings within a pistol’s firing pin or other mechanism. If used, a handgun’s make, model, and serial number can be found on the cartridge case (International Association of Chiefs of Police 2008: n.p.).

Other gun control deficiencies in Iowa include the fact that once a person has been transferred a handgun legally, there is no waiting period to purchase as many additional handguns as desired. Iowa does not limit the number of firearms that can be purchased at one time. Iowa does not have statute to establish and regulate handgun design safety standards; Illinois does.

Illinois does not recognize another state’s handgun permits or licenses and Wisconsin and Nebraska have reciprocity limitations (U.S. Carry Concealed Permit Reciprocity Maps 2016: n.p.). Iowa recognizes all other state permits and licenses. Illinois government officials have 90 days to approve a permit application; Iowa’s is 30 days. The Illinois handgun permit fee is triple Iowa’s fee. Illinois requires a handgun owner to be issued a detailed Firearms Owners Identification (i.e., FOID) card. The FOID, a product of the FOID Act of 1968, is a way to identify those persons eligible to possess and acquire firearms and firearm ammunition as part of a public safety initiative in the State of Illinois. This requirement has been altered a bit, and the law now requires a permit to carry, but a permit to possess and acquire still must be acquired

and possessed on one's person. Similar to Iowa, Illinois state handgun law prohibits local government from enacting law that conflicts with state handgun law. But Illinois handgun law prohibits carrying on/in the following: a private or public elementary or secondary school; and pre-school or childcare facility or its parking lot; any government building under the control of any officer of the legislative or executive branch of state government; any building used for matters of a circuit, appellate, or Supreme Court; any building under the control of any unit of local government; any prison, adult or juvenile detention center, or jail; any private or public hospital, nursing facility, or mental health facility; any publicly funded transportation facility or train, bus, or other form of transportation; and many other public venues such as zoos, museums, parks, stadiums, airports, amusement parks, public libraries, arenas, universities and colleges deeming property as firearm free, nuclear energy facilities, and private property that the proprietor deems necessary to be handgun and firearm free. Iowa's firearm location-prohibition laws are less expansive.

In Nebraska, the city of Omaha requires the registration of all handguns and the city of Lincoln requires reporting of firearms sales other than long guns. Open carry is generally permitted, but may be restricted by local governments. South Dakota does not require a permit, license, or registration of a handgun or long gun. Wisconsin requires a license to carry a concealed handgun, but no registration or license is required to own a handgun; no magazine restrictions are in place; and it also has a law in its constitution providing for an individual's right to bear arms. According to a September 14, 2015 e-mail titled "Reciprocity Alert" sent by the Iowa Firearms Coalition (2015: n.p.), as a result of Iowa's lack of a shooting-for-training requirement for the issuance of an Iowa handgun permit, Minnesota does not recognize Iowa's

permit to carry as well as Utah's, Missouri's, Texas's and Wyoming's permits to carry. Minnesota seems to be sticking to its shooting-as-required training component, stating a person must "show shooting proficiency" for a permit to be issued; as stated earlier Iowa does not require a person to actually fire a handgun prior to being issued a permit to carry. Texas also does not meet Minnesota's age minimum, allowing those 19 years of age and military personnel or veterans to secure a permit to carry handgun irrespective of age. Checking Minnesota's Bureau of Criminal Apprehension, Department of Public Safety website reveals a total of 30 states with laws that violate Minnesota's handgun laws. This list includes Iowa, Missouri, Nebraska, and Wisconsin. South Dakota's regular permit to carry is also invalid in Minnesota; only an "enhanced" South Dakota permit to carry is allowed. Illinois' permit to carry was removed from Minnesota's non-valid permit to carry list in 2016, making Illinois' permits recognized as legal in Minnesota. Iowa's remain non-valid in Minnesota. Minnesota, Illinois, Missouri, South Dakota, Wisconsin, and Nebraska are shall-issue states.

Summary

This study focused on a macro explanation for a form of extremely active handgun use. Urban and technocratic/professional counties have lower handgun permit to carry issuance rates than rural counties. In Iowa, this gap does not change significantly over time. The perceived need, inclination, or motivation to apply for a handgun permit to carry appears to be less in urban and technocratic/professional counties than in the most rural and moderately rural counties. Rural counties display a different set of socio-demographic traits than urban and technocratic/professional counties.

Handgun use is an adaptation to social conditions and challenges. It has become an aspect of certain cultures; but it is not a natural human feature. The Iowa rural social environment and its culture socialize its participants to own, possess, and use handguns, and to use them in the form of carrying these in public. In contrast, urban Iowa's reality functions according to a predominantly handgun-absent social setting and culture. Certain social-demographic identifiers have a different strength, value, and frequency in each setting, separating inhabitants' handgun views and handgun behavioral patterns by each cultural setting. In this sense, gun ownership, possession, and carrying are chosen. Social meanings surrounding these activities are also chosen.

Social meaning involves need fulfillment. Order, tranquility, social justice, family, acceptance, independence, honor, status, among other needs, play out differently in different social settings. Reis (2000: 10) has noted all human beings are driven by these needs and strive to achieve these. But achievement of these needs is realized through different routes in the context of social capacity, process, and structure. Handgun policy could play out differently through localized social processes. But for the moment, the leveling of current Iowa handgun policy has a culturally insensitive context. It is insensitive to urban and technocratic/professional areas' social facts. Given that most Iowans live in urban areas, the failure to realize handgun policy via social contextualism discounts most Iowans' needs. The handgun carrying activity can be understood in this manner. Failure to recognize the different needs of persons living in different cultural and social environments via Iowa handgun public policy can now be recognized as discounting the dignity, safety, and value of persons and their unique living conditions. The law ignores needs of persons living in urban areas.

Guns have slipped through and circumvented urban America's, social structural, protective grate. They have slipped by the social control expected and provided by urban social institutions. Handgun presence has evolved from social needs and forces outside the urban political and social structure. This is observed via the enactment of country-wide legislation broadening gun rights for the few at the expense of the many. Most gun law allows the sports-minded, the hunter, and the target shooter plenty of opportunity to effectuate needs. But the handgun carrying and its appurtenances has become fashionable, stylized, and customized. These have deepened an influential gun culture. Sustained by fashion, and therefore, no different than any other ornamental cultural acquisition, the gun symbolizes, associates, and enhances social status, wealth, power, and individualistic, non-communal desires in an anxiety-ridden, fear-laden, unequal, economic and social condition. The gun culture has deepened as "economic and cultural segregation" intensifies and "gnaw(ing) away at the social order"; contributes to a diminished capacity to realize past levels of material acquisition within middle-class, white America (Leicht 2016: 218).

Gun possession and carrying act to counterbalance this insecurity. As white America wrestles with an inability to accumulate more wealth at the expense of others, global economic pressures are increasing, "entrapping" the traditionally disenfranchised and the previously dominant as well (Leicht 2016: 216). Guns protect few from others; guns simply become a product of the "politics of displacement", occupying "cultural space" to ensure economic equality is unachievable for most; a narrative to be tacitly repressed by elites (Leicht 2016: 217).

The handgun as a killing instrument is not inherently good for the unstable, dynamic, urban setting. Increased handgun permitting in Iowa portends additional harm as rural and urban areas experience a “growing interpenetration and blurring of rural-urban spatial and social boundaries” as adjustments are made to cope with difficult economic changes emanating outside rural America (Lichter and Brown 2011: 565). The relatively new, 2011, handgun law must now be considered an emergent urban issue as its universality pierces a previously underdeveloped handgun permit to carry market.

When applied in this social setting, it can frequently become a justified tool for destructive activity. It can also reinforce a power structure in society. The disenfranchised adapt and use the instrument to cope with an unequal economic, political, and social environment. In this sense, it has become a de facto killer of a segment of society that is not trusted or worthy of concern as well. For some disenfranchised, it has become a tool to lash out and kill those in the role of protecting the social order for the elites. Underlying the gun movement, and despite its inconsistency with greater community needs, the handgun and Iowa’s current handgun laws are simply tools for the power elite’s economic objective to control the masses.

This handgun study has established a tangible starting point for further examination. Many questions remain. From this study, we have learned that the frequency of the very specific handgun permitting activity is changing across Iowa, even if it does not represent the needs of most of the population. Still, findings suggest that the activity is becoming more pervasive and the response to a more generous handgun permitting law produced a similar response across cultural divisions in the state. In addition, we learned that the simple rural-

urban gun explanation is flawed; at least for Iowa. A more complex understanding is necessary as a singular urban and a singular rural culture inadequately explain handgun permitting activity in full. An explanation requires a more complex separation of county cultures, and perhaps further subdivisions. The analysis also revealed that Iowans did not respond in the same way as previous research predicted. Previous research findings predicted that urban areas would experience the most noteworthy increase in handgun permit activity with the onset of a non-discretionary handgun permit law. This was not the case for Iowa. Instead, each county type responded in similar form. Finally, notwithstanding the aforementioned, we did observe that the county type with the historically lowest interest in handgun permitting activity, the technocratic and professional, did “close the gap” a bit between itself and the other county types’ handgun permit to carry issuance rates. This provides grist for further study and questions why this happened and what does the future hold for Iowa and its handgun carrying patterns.

Obviously, further study is critical to understand the multifarious issues and aspects that handgun carrying in cities presents. This may include the examination of handgun criminal activity vis-à-vis the handgun; crime perpetrator and victim handgun use; and neighborhood, census tract, and other, more nuanced geographic and culturally-based subdivisions’ handgun permitting and other handgun activity across the state. Such analyses may provide a better understanding that may produce viable public policy, including social and community health and safety awareness. In this vein, an awareness of potential correlations between handgun carrying and certain criminal activity may act as a prophylactic providing greater community resilience and individual protection.

It is suggested that these data and findings be used for ongoing firearm rights and control discussions at the local level, where it is most important. Local control of public policy sometimes results in the most reasonable policy than federal or state-wide policy. Outside review and oversight needs to consider the unnecessary harm firearms can subject. Further analysis of handgun statutory law can be credibly generated by using updated, similar data. Ignoring these handgun results discounts the needs of the majority of most Iowans, potentially placing many Iowans at risk for handgun harm.

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APPENDICES

APPENDIX A

TABLE A.1 EIGENVALUES OF THE CORRELATION MATRIX

	Eigenvalue	Difference	Proportion	Cumulative
1	3.76	1.81	0.38	0.38
2	1.94	0.86	0.19	0.57
3	1.08	0.18	0.11	0.68
4	0.90	0.19	0.09	0.77
5	0.71	0.19	0.07	0.84
6	0.51	0.11	0.05	0.89
7	0.40	0.09	0.04	0.93
8	0.32	0.09	0.03	0.96
9	0.22	0.07	0.02	0.98
10	0.15		0.02	1.00

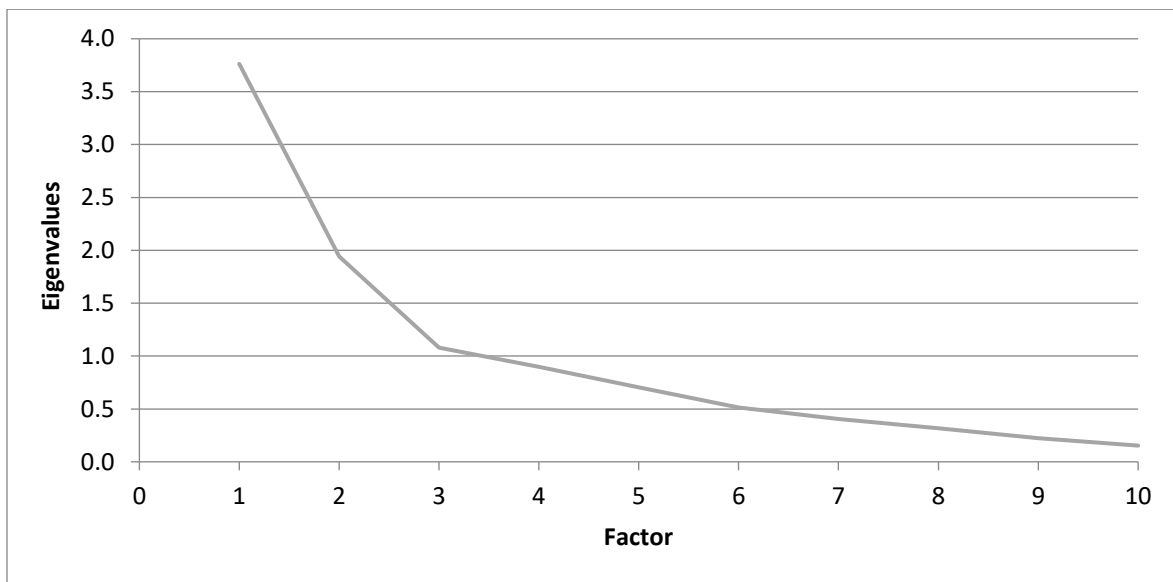


FIGURE A.1 SCREE PLOT OF EIGENVALUES

TABLE A.2 ROTATED FACTOR LOADINGS ON TWO FACTORS (URBAN AND TECHNOCRATIC/PROFESSIONAL)

Variable	(Urban)	(Technocratic/Professional)
Population	0.56	0.49
Age	-0.31	-0.80
Bachelor or higher	0.20	0.78
Median HH Income	-0.30	0.71
Race Black	0.74	0.30
Ethnicity Hispanic	0.14	0.26
Military Veteran	0.21	-0.76
Voter	-0.76	-0.14
Protestant	-0.71	0.06
VioPropCrime	0.76	0.01

TABLE A.3 FACTOR LOADINGS ON THREE FACTORS

Variable	Factor 1	Factor 2	Factor 3
Population	0.42	0.23	0.52
Age	-0.14	0.38	-0.70
Bachelor or higher	0.18	- 0.04	0.82
Median HH Income	0.19	0.25	0.78
Race Black	0.53	0.43	0.28
Ethnicity Hispanic	-0.21	-0.92	-0.08
Veteran	0.25	0.10	-0.68
Voter	-0.84	0.10	0.10
Protestant	-0.72	0.05	-0.04
VioPropCrime	0.54	-0.34	0.02

Note: Three-factor analysis reveals an instance of collinearity, a scarcity of reasonably high loadings and four crossloadings. Three factors are not distinctive and cannot be labeled for factor analysis.

TABLE A.4 MODEL SUMMARIES RELATED TO REGRESSION ANALYSIS FOR 2010 HPIR BY UNEMPLOYMENT (COVARIATE) AND COUNTY TYPE. INFORMS TABLE 4.2 IN CHAPTER 4.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.206 ^a	.042	.033	1.38510%	.042	4.25	1
2	.545 ^b	.298	.268	1.20519%	.255	11.43	3
3	.561 ^c	.314	.269	1.20363%	.017	1.07	2

Model	Change Statistics	
	df2	Sig. F Change
1	97	.042
2	94	.000
3	92	.346

a. Predictors: (Constant), Unemployment; b. Predictors: (Constant), Unemployment, Group=3.0, Group=1.0, Group=2.0; c. Predictors: Group=3.0, Group=1.0, Group=2.0, UnempG1, UnempG2

TABLE A.5 MODEL SUMMARIES RELATED TO REGRESSION ANALYSIS FOR 2013 HPIR BY UNEMPLOYMENT AND COUNTY TYPE. INFORMS TABLE 4.3 IN CHAPTER 4.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.037 ^a	.001	-.009	0.50186%	.001	.097	1

Model	Change Statistics	
	df2	Sig. F Change
1	97	.756

a. Predictors: (Constant), Unemployment

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.352 ^a	.124	.096	0.47501%	.124	4.473	3

Model	Change Statistics	
	df2	Sig. F Change
1	95	.006

a. Predictors: (Constant), Group=3.0, Group=1.0, Group=2.0

TABLE A.6 MODEL SUMMARIES RELATED TO REGRESSION ANALYSIS OF CHANGE FOR HPIR 2011 BY UNEMPLOYMENT AND COUNTY TYPE WITH LAG VARIABLE HPIR 2010. INFORMS TABLE 4.6 IN CHAPTER 4.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.624 ^a	.389	.383	1.41005%	.389	61.812	1
2	.634 ^b	.402	.389	1.40254%	.013	2.087	1

Model	Change Statistics	
	df2	Sig. F Change
1	97	.000
2	96	.152

a. Predictors: (Constant), HPIR_2010 b. Predictors: (Constant), HPIR_2010, Unemployment

TABLE A.7 MODEL SUMMARIES RELATED TO REGRESSION ANALYSIS OF CHANGE FOR HPIR 2013 BY COUNTY TYPE WITH LAG VARIABLE HPIR 2011. INFORMS TABLE 4.8 IN CHAPTER 4.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.505 ^a	.255	.240	0.43567%	.255	16.442	2
2	.506 ^b	.256	.233	0.43762%	.001	.192	1

Model	Change Statistics	
	df2	Sig. F Change
1	96	.000
2	95	.662

a. Predictors: (Constant), HPIR 2010, HPIR 2011 b. Predictors: (Constant), HPIR 2010, HPIR 2011, Unemp

APPENDIX B

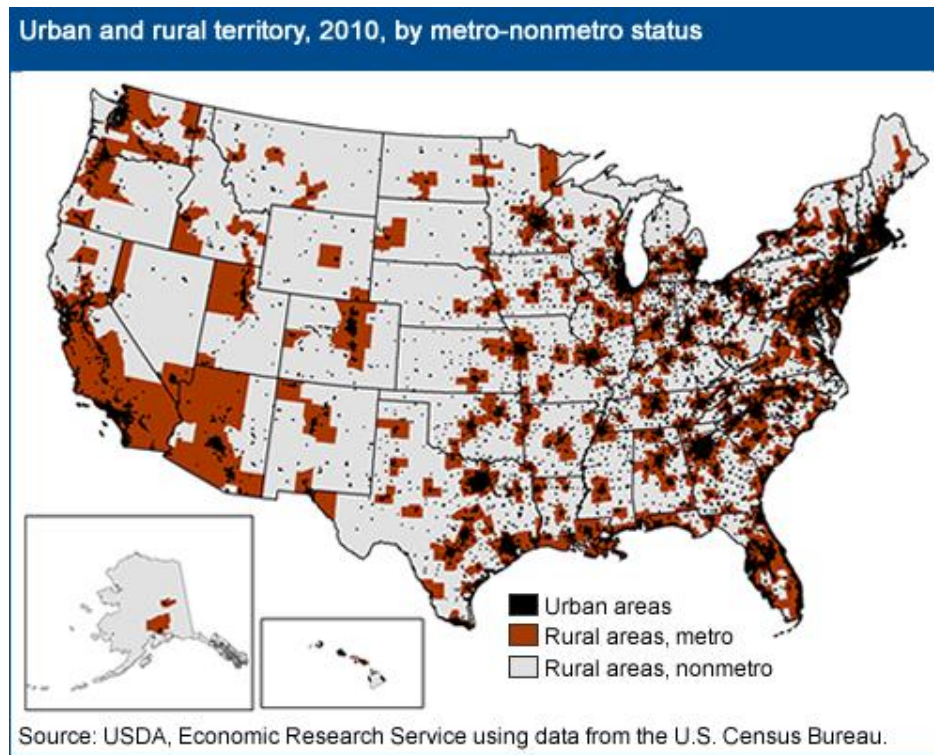


Figure B.1 U.S. URBAN AND RURAL COUNTIES, 2010, BY METROPOLITAN AND NON-METROPOLITAN STATUS

APPENDIX C

IOWA APPLICATION FOR PERMIT TO CARRY WEAPONS

[For a permit to be issued on or after January 1, 2011]

INFORMATION PROVIDED ON THIS FORM IS PUBLIC RECORD

☐ New Application☐ Renewal Application ☐ Permit Number _____ Permit Expiration Date _____
Renewal applications must be received by the issuing officer at least thirty days prior to the expiration of the applicant's current permit**Type of Permit:**☐ Professional Permit (WP1)☐ Peace Officer Permit (WP7)☐ Nonprofessional Permit (WP2)☐ Reserve Peace Officer Permit (WP10)**Training Documentation:**☐ Photocopy of certificate of handgun training☐ Honorable/general discharge or DD-214☐ Affidavit attesting to completion of handgun training ☐ Certificate of completion of military basic training☐ Qualified on a firing range under the supervision of a certified instructor (applies to renewal application only)Name _____ Alias(s) _____
(last) (first) (middle) (other names ever used)Birthdate ____/____/____ Sex M F Phone (____)____-____ Phone (____)____-____
MM DD YYYY CircleResidence _____
(city) (state) (zip)

Driver's License or Non-Operator ID# _____ Driver's License/ID State _____

Place of Birth (state or country) _____ Country of Citizenship _____

If not US citizen, alien registration # (ARN) or I-94 nonimmigrant admission # _____

Authorization for Release – Weapon Permit Applications

I, (print name here) _____, do hereby authorize a review and full disclosure of all records concerning myself, as required by Iowa Code Ch. 724 and Iowa Administrative Code 661 Ch 91, to any duly authorized agent of an Iowa sheriff or the Commissioner of the Iowa Department of Public Safety, whether the said records are of a public, private or confidential nature.

The intent of this authorization is to give my consent for full and complete disclosure of records of psychiatric treatment, substance abuse treatment, consultation and/or court ordered involuntary committal for treatment including those records held by hospitals, clinics, private practitioners, the U.S. Veterans Administration and clerks of court, as necessary to verify that I meet the requirements of the state of Iowa and the United States for the acquisition and possession of a firearm. I understand that the information contained in these records will be used for no purpose other than those stated above, and will be kept strictly confidential by the office of the issuing official.

I understand that any information obtained which is developed directly or indirectly, in whole or part, upon this release authorization will be considered in determining my qualification for obtaining a permit to carry weapons in the state of Iowa. I also certify that any person(s) who may furnish such information concerning me shall not be held accountable for providing accurate information, and I do hereby release said person(s) from any and all liability which may be incurred as a result of furnishing such information.

I understand that information provided on this application form is considered public record and may be disclosed upon request.

I certify that all information, including supporting documentation, provided in this application is true and correct, and I understand that I may be convicted of a class ☐felony pursuant to Iowa Code section 724.10(3) if I make what I know to be a false statement of material fact on this application or if I submit what I know to be any materially falsified or forged documentation in connection with this application.

Applicant Signature _____ Date _____

Answer all questions on reverse side and complete employer authorization section (if applicable)

WP5 Rev. 2011.1 10/29/2010

All of the following questions must be answered:

Yes No

- ☐ ☐ 1. Do you have charges pending in any state for a felony, or any other crime for which the court could sentence you to imprisonment for more than one year?
- ☐ ☐ 2. Have you ever been convicted in any court of a felony, or any other crime involving a firearm or explosives for which the court could have sentenced you to imprisonment for more than one year, even if you received a shorter sentence including probation?
- ☐ ☐ 3. Have you been convicted in any court within the previous three years of a serious or aggravated misdemeanor defined in Iowa Code Ch. 708 not involving a firearm or explosives for which the court could have imprisoned you for more than one year, even if you received a shorter sentence including probation?
- ☐ ☐ 4. Are you a fugitive from justice (outstanding arrest warrants)?
- ☐ ☐ 5. Are you an unlawful user of, or addicted to, any controlled substance?
- ☐ ☐ 6. Have you ever been adjudicated mentally defective (which includes a determination by a court, board, commission, or other lawful authority that you are a danger to yourself or to others or are incompetent to manage your own affairs) OR have you ever been committed to a mental institution?
- ☐ ☐ 7. Have you been discharged from the Armed Forces under dishonorable conditions?
- ☐ ☐ 8. Are you subject to a court order restraining you from harassing, stalking, or threatening your child or an intimate partner or child of such partner?
- ☐ ☐ 9. Have you ever been convicted in any court of a misdemeanor crime of domestic violence?
- ☐ ☐ 10. Are you a citizen of the United States? (IF NO, immigrant must provide alien registration number (ARN); nonimmigrant must provide I-94 registration number and documentation showing an exception to the nonimmigrant alien prohibition (e.g., valid hunting license issued in any state, letter from the U.S. Attorney General granting a waiver, etc.).
- ☐ ☐ 11. Have you ever renounced your United States citizenship?

EMPLOYER AUTHORIZATION (required for Professional Permit only)

Employer Name _____ Telephone _____

Employer Address _____

Employment Justification _____

Employer Signature _____ Date _____

ISSUING OFFICER (Iowa Sheriff or Commissioner of Public Safety)

Application: ☐ Approved ☐ Denied Date _____

Reason Denied: _____

Written Denial Notice Provided By (method) _____ on (date) _____

Signature _____ ☐ Sheriff of _____ County, Iowa

☐ Commissioner of the Iowa Department of Public Safety

FIGURE C.1 THE STATE OF IOWA APPLICATION FOR PERMIT TO CARRY WEAPONS FORM
(EFFECTIVE JANUARY 1, 2011)